DUKE ENERGY
FLORIDA

Dianne M. Triplett
DEPUTY GENERAL COUNSEL
Duke Energy Florida, LLC

April 1, 2022

VIA ELECTRONIC DELIVERY

Adam J. Teitzman, Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: *2022 Ten-Year Site Plan Data Request #1; Undocketed*

Dear Mr. Teitzman:

Please find enclosed for filing, Duke Energy Florida, LLC's Response to Staff's Data Request #1, questions 1 and 2 regarding the 2022 TYSP, issued on March 7, 2022.

Thank you for your assistance in this matter. Please feel free to call me at (727) 820-4692 should you have any questions.

Sincerely,

s/ Dianne M. Triplett

Dianne M. Triplett

DMT/mw
Attachments

cc: Donald Phillips, Division of Engineering, FPSC

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Phone: 727.820.4692 ▪ Fax: 727.820.5041 ▪ Email: dianne.triplett@duke-energy.com

DEF's Response Staff's Data Request Regarding the 2022 TYSP; Questions 1 and 2

1. Please provide an electronic copy of the Company's Ten-Year Site Plan (TYSP) for the period 2022-2031 (current planning period) in PDF format.

   Response: Please see the attached.

2. Please provide an electronic copy of all schedules and tables in the Company's current planning period TYSP in Microsoft Excel format.

   Response: Please see the attached in pdf and Excel format.

Duke Energy Florida, LLC
Ten-Year Site Plan

April 2022

2022-2031

Submitted to:
Florida Public Service Commission

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LIST OF REQUIRED SCHEDULES

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CODE IDENTIFICATION SHEET

Generating Unit Type

ST - Steam Turbine - Non-Nuclear
NP - Steam Power - Nuclear
GT - Gas Turbine
CT - Combustion Turbine
CC - Combined Cycle
SPP - Small Power Producer
COG - Cogeneration Facility
PV – Photovoltaic
SPS – Solar (PV) Plus Storage

Fuel Type

NUC - Nuclear (Uranium)
NG - Natural Gas
RFO - No. 6 Residual Fuel Oil
DFO - No. 2 Distillate Fuel Oil
BIT - Bituminous Coal
MSW - Municipal Solid Waste
WH - Waste Heat
BIO – Biomass
SO – Solar PV

Fuel Transportation

WA - Water
TK - Truck
RR - Railroad
PL - Pipeline
UN - Unknown

Future Generating Unit Status

A - Generating unit capability increased
D – Generating unit capability decreased
FC - Existing generator planned for conversion to another fuel or energy source
P - Planned for installation but not authorized; not under construction
RP - Proposed for repowering or life extension
RT - Existing generator scheduled for retirement
T - Regulatory approval received but not under construction
U - Under construction, less than or equal to 50% complete
V - Under construction, more than 50% complete

EXECUTIVE SUMMARY

Duke Energy Florida's (DEF) 2022 Ten-Year Site Plan (TYSP) provides a description of the future electric generating unit additions and retirements selected to meet projected DEF customer resource needs for 2022 through 2031. DEF's plan advances the transition to a cleaner and more cost-effective generating fleet. In the near term, DEF anticipates the expiration of high-priced legacy contracts and retirement of numerous older simple cycle combustion turbine (CT) units offset by a planned investment in new solar and solar plus storage generation. Looking out beyond the ten-year horizon, DEF anticipates the retirement of the remaining two coal fired generating units and the potential to replace the most of energy supplied by those units with energy generated from future solar generating projects.

DEF's planned investments in renewable generation will enable fuel savings for customers, energy diversification, and will continue DEF's commitment towards a lower carbon future. Through this TYSP, DEF is planning to extend the successful deployment of utility scale solar projects approved by the Florida Public Service Commission (FPSC) in 2017 and 2021, which will bring over 1,500 MW of solar generating capacity to the DEF system through early 2024. Over the remainder of the ten-year planning period, DEF projects the addition of 300 MW per year of utility scale solar. By the end of the period, DEF expects to have more than 3,500 MW of utility scale solar generating capacity online.

DEF's measured and steady pace of projected solar generation adoption will combine with the increasingly clean gas fired generating fleet. No major changes in the gas fired fleet are anticipated beyond the combustion turbine retirements and contract expirations. Taken together, DEF anticipates a reduction in the fossil fuel fired generation of approximately 1,500 MW over the planning period. A single new combustion turbine is planned in 2029. This unit combines with over 100 MW of batteries paired with solar units in 2029-2031 to balance the system and provide reliability resources supporting the large amount of planned solar generation.

In addition to improvements to the existing asset portfolio and the planned solar, DEF continues to build upon its pilot battery program approved in 2017. This program brings 50 MW of batteries coming into service in 2021 and 2022. These batteries will provide a variety of services including solar energy storage and smoothing, grid support and voltage control, and deferral of potential new distribution investments.

DEF plans to meet the power needs of its customers cost-effectively while adding an increasing portfolio of non-carbon emitting assets. The future solar and storage in this expansion plan provides energy diversity by reducing both reliance on natural gas and its associated price volatility risk for customers. Combined with the existing our existing fleet, the proposed new assets in this TYSP will provide fuel cost savings for customers while also increasing the system's energy diversity, and reliability.

INTRODUCTION

Section 186.801 of the Florida Statutes requires electric generating utilities to submit a TYSP to the FPSC. The TYSP includes historical and projected data pertaining to the utility's load and resource needs as well as a review of those needs, DEF's TYSP is compiled in accordance with FPSC Rules 25-22.070 through 25-22.072, Florida Administrative Code (F.A.C.).

DEF's TYSP is based on the projections of long-term planning requirements that are dynamic in nature and subject to change. These planning documents should be used for general guidance concerning DEF's planning assumptions and projections and should not be taken as an assurance that particular events discussed in the TYSP will materialize or that particular plans will be implemented. Information and projections pertinent to periods further out in time are inherently subject to greater uncertainty.

This TYSP document contains four chapters as indicated below:

- **CHAPTER 1 - DESCRIPTION OF EXISTING FACILITIES**

  This chapter provides an overview of DEF's generating resources as well as the transmission and distribution system.

- **CHAPTER 2 - FORECAST OF ELECTRICAL POWER DEMAND AND ENERGY CONSUMPTION**

  Chapter 2 presents the history and forecast for load and peak demand as well as the forecast methodology used. Demand-Side Management (DSM) savings and fuel requirement projections are also included.

- **CHAPTER 3 - FORECAST OF FACILITIES REQUIREMENTS**

  The resource planning forecast, transmission planning forecast as well as the proposed generating facilities and bulk transmission line additions status are discussed in Chapter 3.

- **CHAPTER 4 - ENVIRONMENTAL AND LAND USE INFORMATION**

  Preferred and potential site locations along with any environmental and land use information are presented in this chapter.

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CHAPTER 1

DESCRIPTION OF EXISTING FACILITIES

CHAPTER 1

DESCRIPTION OF EXISTING FACILITIES

EXISTING FACILITIES OVERVIEW

OWNERSHIP

Duke Energy Florida, LLC (DEF or the Company) is a wholly owned subsidiary of Duke Energy Corporation (Duke Energy).

AREA OF SERVICE

DEF has an obligation to serve approximately 1.9 million customers in Florida. Its service area covers approximately 20,000 square miles in west central Florida and includes the densely populated areas around Orlando, as well as the cities of Saint Petersburg and Clearwater. DEF is interconnected with 21 municipal and nine rural electric cooperative systems who serve additional customers in Florida. DEF is subject to the rules and regulations of the Federal Energy Regulatory Commission (FERC), the Nuclear Regulatory Commission (NRC), and the FPSC. DEF's Service Area is shown in Figure 1.1.

TRANSMISSION/DISTRIBUTION

The Company is part of a nationwide interconnected power network that enables power to be exchanged between utilities. The DEF transmission system includes approximately 5,200 circuit miles of transmission lines. The distribution system includes approximately 18,000 circuit miles of overhead distribution conductors and approximately 14,000 circuit miles of underground distribution cable.

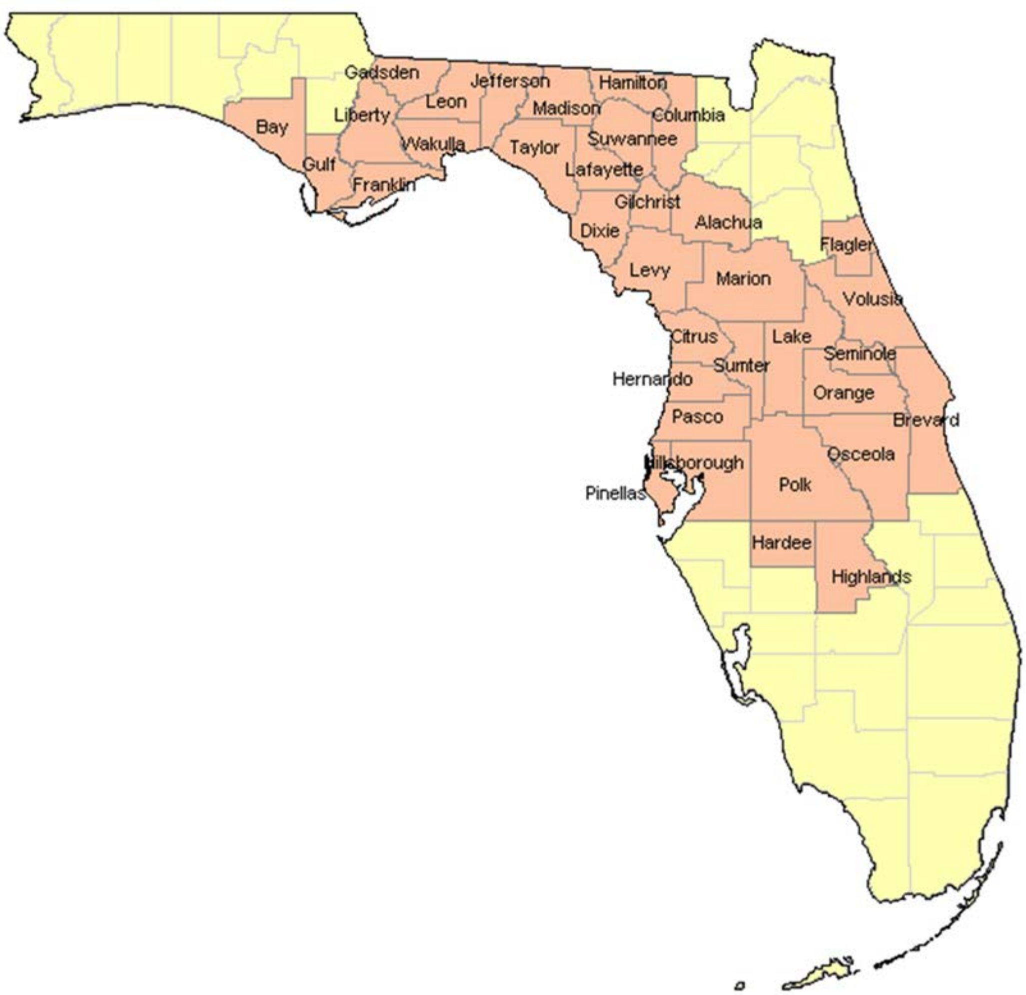
ENERGY MANAGEMENT and ENERGY EFFICIENCY

The Company's residential Energy Management program represents a demand response (DR) type of program where participating customers help manage future growth and costs. Approximately 434,000 customers participated in the residential Energy Management program during 2021, contributing about 671 MW of winter peak-shaving capacity for use during high load periods. DEF's currently approved DSM programs consist of five residential programs, six commercial and industrial programs and one research and development program.

TOTAL CAPACITY RESOURCE

As of December 31, 2021, DEF had total summer firm capacity resources of 11,495 MW consisting of installed capacity of 9,948 MW and 1,547 MW of firm purchased power. Additional information on DEF's existing generating resources can be found in Schedule 1 and Table 3.1 (Chapter 3).

FIGURE 1.1
DUKE ENERGY FLORIDA
County Service Area Map



DUKE ENERGY FLORIDA

SCHEDULE 1
EXISTING GENERATING FACILITIES

AS OF DECEMBER 31, 2021

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
									COM'L IN-	EXPECTED	GEN. MAX.	NET CAPABILITY	
	UNIT	LOCATION	UNIT	FUEL		FUEL TRANSPORT		ALT. FUEL	SERVICE	RETIREMENT	NAMEPLATE	SUMMER	WINTER
PLANT NAME	NO.	(COUNTY)	TYPE	PRI.	ALT.	PRI.	ALT.	DAYS USE	MO./YEAR	MO./YEAR	KW	MW	MW
STEAM													
ANCLOTE	1	PASCO	ST	NG		PL			10/74		556,200	508	521
ANCLOTE	2	PASCO	ST	NG		PL			10/78		556,200	505	514
CRYSTAL RIVER	4	CITRUS	ST	BIT		WA	RR		12/82		739,260	712	721
CRYSTAL RIVER	5	CITRUS	ST	BIT		WA	RR		10/84		739,260	698	709
											Steam Total	**2,423**	**2,465**
COMBINED-CYCLE													
P L BARTOW	4	PINELLAS	CC	NG	DFO	PL	TK	*	6/09		1,254,200	1,112	1,259
CITRUS COUNTY COMBINED CYCLE	PB1	CITRUS	CC	NG		PL			10/18		985,150	807	941
CITRUS COUNTY COMBINED CYCLE	PB2	CITRUS	CC	NG		PL			11/18		985,150	803	943
HINES ENERGY COMPLEX	1	POLK	CC	NG		PL			4/99		546,500	490	521
HINES ENERGY COMPLEX	2	POLK	CC	NG	DFO	PL	TK	*	12/03		548,250	532	549
HINES ENERGY COMPLEX	3	POLK	CC	NG	DFO	PL	TK	*	11/05		561,000	523	555
HINES ENERGY COMPLEX	4	POLK	CC	NG	DFO	PL	TK	*	12/07		610,500	516	544
OSPREY ENERGY CENTER POWER PLANT	1	POLK	CC	NG		PL			5/04		644,300	245	245
TIGER BAY	1	POLK	CC	NG		PL			8/97		278,100	193	224
											CC Total	**5,221**	**5,781**
COMBUSTION TURBINE													
BARTOW	P1	PINELLAS	CT	DFO		WA		*	5/72	6/2027 **	55,400	41	48
BARTOW	P2	PINELLAS	CT	NG	DFO	PL	WA	*	6/72		55,400	41	50
BARTOW	P3	PINELLAS	CT	DFO		WA		*	6/72	6/2027 **	55,400	41	53
BARTOW	P4	PINELLAS	CT	NG	DFO	PL	WA	*	6/72		55,400	45	58
BAYBORO	P1	PINELLAS	CT	DFO		WA		*	4/73	12/2025 **	56,700	44	58
BAYBORO	P2	PINELLAS	CT	DFO		WA		*	4/73	12/2025 **	56,700	41	55
BAYBORO	P3	PINELLAS	CT	DFO		WA		*	4/73	12/2025 **	56,700	43	57
BAYBORO	P4	PINELLAS	CT	DFO		WA		*	4/73	12/2025 **	56,700	43	56
DEBARY	P2	VOLUSIA	CT	DFO		TK		*	12/75-4/76	6/2027 **	73,440	45	57
DEBARY	P3	VOLUSIA	CT	DFO		TK		*	12/75-4/76	6/2027 **	73,440	45	59
DEBARY	P4	VOLUSIA	CT	DFO		TK		*	12/75-4/76	6/2027 **	73,440	46	59
DEBARY	P5	VOLUSIA	CT	DFO		TK		*	12/75-4/76	6/2027 **	73,440	45	58
DEBARY	P6	VOLUSIA	CT	DFO		TK		*	12/75-4/76	6/2027 **	73,440	46	59
DEBARY	P7	VOLUSIA	CT	NG	DFO	PL	TK	*	10/92		103,500	74	93
DEBARY	P8	VOLUSIA	CT	NG	DFO	PL	TK	*	10/92		103,500	75	94
DEBARY	P9	VOLUSIA	CT	NG	DFO	PL	TK	*	10/92		103,500	76	94
DEBARY	P10	VOLUSIA	CT	DFO		TK		*	10/92		103,500	72	88
INTERCESSION CITY	P1	OSCEOLA	CT	DFO		PL,TK		*	5/74		56,700	45	61
INTERCESSION CITY	P2	OSCEOLA	CT	DFO		PL,TK		*	5/74		56,700	46	60
INTERCESSION CITY	P3	OSCEOLA	CT	DFO		PL,TK		*	5/74		56,700	46	61
INTERCESSION CITY	P4	OSCEOLA	CT	DFO		PL,TK		*	5/74		56,700	46	62
INTERCESSION CITY	P5	OSCEOLA	CT	DFO		PL,TK		*	5/74		56,700	45	59
INTERCESSION CITY	P6	OSCEOLA	CT	DFO		PL,TK		*	5/74		56,700	47	60
INTERCESSION CITY	P7	OSCEOLA	CT	NG	DFO	PL	PL,TK	*	10/93		103,500	78	95
INTERCESSION CITY	P8	OSCEOLA	CT	NG	DFO	PL	PL,TK	*	10/93		103,500	77	95
INTERCESSION CITY	P9	OSCEOLA	CT	NG	DFO	PL	PL,TK	*	10/93		103,500	77	95
INTERCESSION CITY	P10	OSCEOLA	CT	NG	DFO	PL	PL,TK	*	10/93		103,500	74	94
INTERCESSION CITY	P11	OSCEOLA	CT	DFO		PL,TK		*	1/97		148,500	140	161
INTERCESSION CITY	P12	OSCEOLA	CT	NG	DFO	PL	PL,TK	*	12/00		98,260	69	89
INTERCESSION CITY	P13	OSCEOLA	CT	NG	DFO	PL	PL,TK	*	12/00		98,260	71	91
INTERCESSION CITY	P14	OSCEOLA	CT	NG	DFO	PL	PL,TK	*	12/00		98,260	70	90
SUWANNEE RIVER	P1	SUWANNEE	CT	NG	DFO	PL	TK	*	10/80		65,999	48	65
SUWANNEE RIVER	P2	SUWANNEE	CT	DFO		TK		*	10/80		65,999	48	64
SUWANNEE RIVER	P3	SUWANNEE	CT	NG	DFO	PL	TK	*	11/80		65,999	49	65
UNIVERSITY OF FLORIDA	P1	ALACHUA	GT	NG		PL			1/94	11/2027 **	43,000	44	50
											CT Total	**1,983**	**2,513**
SOLAR													
OSCEOLA SOLAR FACILITY	PV1	OSCEOLA	PV	SO					5/16		3,800	2	0
PERRY SOLAR FACILITY	PV1	TAYLOR	PV	SO					8/16		5,100	2	0
SUWANNEE RIVER SOLAR FACILITY	PV1	SUWANNEE	PV	SO					11/17		8,800	4	0
HAMILTON SOLAR POWER PLANT	PV1	HAMILTON	PV	SO					12/18		74,900	42	0
TRENTON SOLAR POWER PLANT	PV1	GILCHRIST	PV	SO					12/19		74,900	42	0
LAKE PLACID SOLAR POWER PLANT	PV1	HIGHLANDS	PV	SO					12/19		45,000	25	0
ST PETERSBURG PIER	PV1	PINELLAS	PV	SO					12/19		350	0	0
COLUMBIA SOLAR POWER PLANT	PV1	COLUMBIA	PV	SO					3/20		74,900	42	0
DEBARY SOLAR POWER PLANT	PV1	VOLUSIA	PV	SO					5/20		74,500	33	0
SANTA FE SOLAR POWER PLANT	PV1	COLUMBIA	PV	SO					3/21		74,900	43	0
TWIN RIVERS SOLAR POWER PLANT	PV1	HAMILTON	PV	SO					3/21		74,900	43	0
DUETTE SOLAR POWER PLANT	PV1	MANATEE	PV	SO					10/21		74,500	42	0
											SOLAR Total	**321**	**-**
											TOTAL RESOURCES (MW)	**9,948**	**10,759**

* APPROXIMATELY 2 TO 3 DAYS OF OIL USE TYPICALLY TARGETED FOR ENTIRE PLANT.
** DATES FOR RETIREMENT ARE APPROXIMATE AND SUBJECT TO CHANGE

CHAPTER 2

FORECAST OF ELECTRIC POWER DEMAND AND ENERGY CONSUMPTION

CHAPTER 2
FORECAST OF ELECTRIC POWER DEMAND AND ENERGY CONSUMPTION

OVERVIEW

The information presented in Schedules 2, 3, and 4 represents DEF's history and forecast of customers, energy sales (GWh), and peak demand (MW). In general, this discussion refers to DEF's base forecast. Economic data from mid-2021 reflected a national economy continuing the longest duration expansion in U.S. history until the Spring 2020 when the response to the COVID-19 pandemic froze large segments of the U.S. economy. A revised total maximum amount of U.S. jobs lost due to COVID-19 was estimated to have been 22.4 million U.S. jobs between March and April 2020. While job gains commenced, a return to "normalcy" would not begin until vaccines arrived and "social distancing" restrictions were eased. By year end, the U.S. Bureau of Labor Statistics (BLS) announced (January 7, 2022) a gain of 18.8 million total U.S. jobs and that the national unemployment rate had dropped to 3.9% in December 2021, down from a peak of 15% in April 2020.

According to the Florida Department of Employment Opportunity (January 2022), Florida lost 1.27 million jobs from February to April 2020. By December 2021, 1.17 million jobs or 92% of the pre-pandemic peak had returned. As of December 2021, Florida jobs are up 479,300 jobs over December 2020. Florida unemployment peaked at over 14% and has dropped back to 4.4% in December 2021.

The various pandemic relief plans put in place had a favorable impact on holding down the damage to the U.S. and Florida economies. Also, loose monetary policies from the Federal Reserve Board held interest rates to historical lows allowing borrowers to stay afloat. The rise of the Omicron variant in late 2021, along with a sharp rise in inflation, stunted some of the economic momentum. A rapid increase in demand for manufactured goods post-lockdown is believed to have created supply-chain issues for many products where labor is in short supply.

High population in-migration from out-of-State offset decreased net international migration, decreased birth rates and increased mortality, creating a modest level of population growth for the year.

Assumptions around economic activity within the U.S. and DEF service territory are as assumed in the Moody's Analytics July 2021 Baseline U.S. Macro and Florida economic projections. The projection called for herd resilience, defined as a 65% or a greater share of the adult population being fully vaccinated or previously infected, to occur in September. The July forecast also assumed that federal lawmakers would pass the bipartisan infrastructure bill through regular order and a partisan Build Back Better package through budget reconciliation. The latter would only receive Democratic votes and would cover many other areas of President Biden's fiscal agenda that were excluded from the bipartisan deal. If the bipartisan infrastructure deal were to falter, the forecast assumed it would instead get included in a partisan reconciliation bill. What impacts the real economy forecast is not necessarily passage, but rather implementation, of the Build Back Better proposals. Whether Congress passes one or two bills to do so, implementation was assumed to occur in early 2022.

On Monetary policy the Moody's forecast assumed the Federal Reserve (Fed) would maintain a near-zero policy rate until the first quarter of 2023, and then begin a gradual schedule of rate hikes until reaching 2.4% in 2025. They expected the Fed to announce its tapering plans in September and the $15 billion reduction to occur at each Federal Open Market Committee meeting in 2022. The Fed has signaled that it wants tapering to be on autopilot. Once its monthly asset purchases have been reduced from $120 billion to zero, the Fed will reinvest proceeds from maturing assets to ensure its balance sheet does not contract, which would be contractionary monetary policy. The forecast projected the Consumer Price Index will rise at an annualized rate of nearly 8% in the second quarter of 2021. The unemployment rate was forecast to average 5.5% in 2021 before decreasing to 3.76% and 3.5% in 2022 and 2023, respectively.

The projections incorporated in this site plan forecast a continued pickup in economic growth due to a higher than usual savings rate. The "supply chain" issues have caused some to delay purchases, specifically for automobiles. Also, demand for housing in the State has been strong all year. Low mortgage rates played a major part as well as the push from large increases in rental unit charges.

Economic measures are expected to return to somewhat normal levels of growth in 2022 for both the U.S. and Florida economies over the first half of the Site Plan horizon. There will be a debt to be repaid by several “actors” in the national economy due to COVID-19 relief. This should limit the probability of strong economic growth. The housing sector could remain healthy due to strong demand. However, higher expected mortgage rates could reduce demand somewhat going forward.

Florida population growth is expected to continue to be supported by higher numbers of retirees as the height of the Baby-Boomer generation, those born in 1957, turn 65 in 2022. The U.S. set a record of “live births” in 1957 that was only surpassed fifty years later in 2007. The favorable tax climate in Florida helps it attract retirees. As a response to the pandemic, working remotely has become a more of a long-term reality for many jobs. Florida should continue to see additional in-migration as people move to the state to work from home, especially if they already have a second home in Florida. Population growth in the DEF service area will continue to rise. Urban high-rise living has increased in popularity in several major load areas. Announcements of additional ecommerce fulfillment centers in DEF service territory continued in 2021 and talk of a Miami-Orlando-Tampa rail system is being planned out. The decision by Nucor Steel to locate in central Florida to produce structural re-bar hit projected operating levels by Q2:21 and brought additional confidence that the State can support more diversified heavy manufacturing industries.

Historical 29 county service area household, population, and people per household data along with the most recent population projections from the University of Florida’s Bureau of Economic and Business Research (BEBR Bulletin 186) were used for the Base Case service area population projection while Bulletin 189 was used for the High & Low Case population projections. The DEF service area population has been estimated to have grown at an average ten-year growth rate of 1.41% from 2012-2021 (Schedule 2.1.1 Column 2). Demographic conditions going forward weaken due to higher mortality rates of aging baby-boomers to a level of 1.0% over the 2022-2031 period. The rate of residential customer growth, which averaged 1.63% per year over the historical ten-year period, is expected to continue at an average of 1.68%. The total number of DEF customers grew from 1.65 million in 2012 to 1.90 million in 2021, an increase of 248,887 or 1.57% annual growth rate. The projected number of additional total customers between 2022 and 2031 is 298,882 for a 1.61% annual growth rate.

Responses to the pandemic which changed the patterns of class energy consumption have begun to revert back to pre-COVID usage characteristics. The jump in "work from home" still exists but at a smaller level than that reached early on in the pandemic. The "schooling from home" has mostly ended. Both changes have caused a decrease in residential energy consumption. Contrarily, increases in commercial, industrial and OPA class energy requirements have returned as well. Sales to the industrial class was helped by the Nucor Steel plant startup.

From 2012 to 2021, net energy for load (NEL) increased by 1.0% per year (Schedule 2.3.1 Column 4). The average projected ten-year Compound Annual Growth Rate (CAGR) for NEL is 0.36%, due in large measure to an average annual decline in Sales for Resale of -33.84% during the forecast period offsetting stronger retail growth. Long term, DEF Sales for Resale energy sales are projected to essentially disappear.

During the 2012 to 2021 historical period the DEF summer net firm demand (Schedule 3.1.1 Column 10) increased from 8,337 MW to 8,826 MW, an average annual ten-year increase of 0.64%. This increase was driven by the ten-year average customer growth of 1.57% per year offset by negative growth in the Sales for Resale summer peak, higher conservation levels and additional residential demand response capability (Schedule 3.3.1). The projected total DEF summer net firm demand increases by an average annual rate of 0.05% between 2022 and 2031 due to continued declines in projected Wholesale peak demand (-8.39% per year). The historical DEF firm winter peak ten-year change was -0.84% per year due to an average annual drop of -3.14% in Wholesale winter peak and warmer weather in the most recent winters. Projected total DEF winter net firm demand decreased by an average annual rate of -0.15% per year between 2022 and 2031 due to continued reductions in the projected Sales for Resale peak demand (-9.87% annual average decline) offset by expected ten-year growth in Retail winter peak of 0.79%. Both summer and winter Sales for Resale peak demand are expected to decline significantly towards the end of the ten-year projection.

DEF continues to provide alternate “high” and “low” forecasts for customers, energy and peak demand, recognizing that the current economic expansion may continue to accelerate or could unwind due to a rapid tightening of monetary policy or an unexpected economic imbalance or global political event. Moody’s S1 and S3 (high & low) Florida economic scenarios were used to provide a range of economic variables around the Base Case scenario. These were combined with high and low peak weather scenarios for each season and high and low population growth scenarios from the BEBR Bulletin 189.

ENERGY CONSUMPTION AND DEMAND FORECAST SCHEDULES

The below schedules have been provided to represent DEF’s expectations for a Base Case as well as reasonable High and Low forecast scenarios for resource planning purposes. (Base-B, High-H and Low-L):

SCHEDULE	DESCRIPTION
2.1, 2.2 and 2.3	History and Forecast of Energy Consumption and Number of Customers by Customer Class (B, H and L)
3.1	History and Forecast of Base Summer Peak Demand (MW) (B, H and L)
3.2	History and Forecast of Base Winter Peak Demand (MW) (B, H and L)
3.3	History and Forecast of Base Annual Net Energy for Load (GWh) (B, H and L)
4	Previous Year Actual and Two-Year Forecast of Peak Demand and Net Energy for Load by Month (B, H and L)

DUKE ENERGY FLORIDA

SCHEDULE 2.1.1
HISTORY AND FORECAST OF ENERGY CONSUMPTION AND
NUMBER OF CUSTOMERS BY CUSTOMER CLASS
BASE CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	RURAL AND RESIDENTIAL					COMMERCIAL		
YEAR	DEF POPULATION	MEMBERS PER HOUSEHOLD	GWh	AVERAGE NO. OF CUSTOMERS	AVERAGE KWh CONSUMPTION PER CUSTOMER	GWh	AVERAGE NO. OF CUSTOMERS	AVERAGE KWh CONSUMPTION PER CUSTOMER
HISTORY:								
2012	3,641,179	2.496	18,251	1,458,690	12,512	11,723	163,297	71,792
2013	3,713,013	2.495	18,508	1,488,159	12,437	11,718	165,936	70,617
2014	3,747,160	2.492	19,003	1,503,758	12,637	11,789	167,253	70,485
2015	3,794,138	2.489	19,932	1,524,605	13,074	12,070	169,147	71,359
2016	3,837,436	2.485	20,265	1,543,967	13,126	12,094	170,999	70,724
2017	3,906,975	2.483	19,791	1,573,260	12,579	11,918	173,695	68,612
2018	3,968,241	2.485	20,636	1,597,132	12,920	12,172	175,848	69,216
2019	4,037,435	2.483	20,775	1,626,117	12,776	12,198	178,036	68,514
2020	4,089,498	2.471	21,459	1,655,304	12,964	11,522	179,666	64,129
2021	4,130,929	2.448	21,192	1,687,471	12,558	11,785	182,195	64,686
FORECAST:								
2022	4,175,116	2.424	21,214	1,722,408	12,316	11,612	184,713	62,863
2023	4,220,714	2.402	21,314	1,757,167	12,130	11,672	187,182	62,357
2024	4,268,217	2.382	21,410	1,791,863	11,949	11,723	189,507	61,862
2025	4,314,204	2.362	21,697	1,826,504	11,879	11,778	191,767	61,419
2026	4,359,968	2.344	21,786	1,860,055	11,713	11,708	193,922	60,376
2027	4,403,850	2.328	22,167	1,891,688	11,718	11,780	195,961	60,112
2028	4,446,357	2.314	22,419	1,921,503	11,667	11,852	197,879	59,894
2029	4,487,654	2.302	22,743	1,949,459	11,667	11,962	199,674	59,905
2030	4,527,042	2.291	22,948	1,976,011	11,613	12,045	201,375	59,813
2031	4,564,780	2.281	23,224	2,001,219	11,605	12,168	202,988	59,943

DUKE ENERGY FLORIDA

SCHEDULE 2.1.2

HISTORY AND FORECAST OF ENERGY CONSUMPTION AND

NUMBER OF CUSTOMERS BY CUSTOMER CLASS

HIGH CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	RURAL AND RESIDENTIAL					COMMERCIAL		
YEAR	DEF POPULATION	MEMBERS PER HOUSEHOLD	GWh	AVERAGE NO. OF CUSTOMERS	AVERAGE KWh CONSUMPTION PER CUSTOMER	GWh	AVERAGE NO. OF CUSTOMERS	AVERAGE KWh CONSUMPTION PER CUSTOMER
HISTORY:								
2012	3,641,179	2.496	18,251	1,458,690	12,512	11,723	163,297	71,792
2013	3,713,013	2.495	18,508	1,488,159	12,437	11,718	165,936	70,617
2014	3,747,160	2.492	19,003	1,503,758	12,637	11,789	167,253	70,485
2015	3,794,138	2.489	19,932	1,524,605	13,074	12,070	169,147	71,359
2016	3,837,436	2.485	20,265	1,543,967	13,126	12,094	170,999	70,724
2017	3,906,975	2.483	19,791	1,573,260	12,579	11,918	173,695	68,612
2018	3,968,241	2.485	20,636	1,597,132	12,920	12,172	175,848	69,216
2019	4,037,435	2.483	20,775	1,626,117	12,776	12,198	178,036	68,514
2020	4,089,498	2.471	21,459	1,655,304	12,964	11,522	179,666	64,129
2021	4,130,929	2.448	21,192	1,687,471	12,558	11,785	182,195	64,686
FORECAST:								
2022	4,176,181	2.424	22,718	1,722,847	13,186	11,953	184,709	64,711
2023	4,229,176	2.402	22,805	1,760,689	12,953	11,963	187,405	63,833
2024	4,289,574	2.382	23,022	1,800,829	12,784	12,033	190,075	63,309
2025	4,346,684	2.362	23,250	1,840,256	12,634	12,066	192,637	62,638
2026	4,400,801	2.344	23,538	1,877,475	12,537	12,097	195,025	62,027
2027	4,450,402	2.328	23,860	1,911,685	12,481	12,130	197,227	61,501
2028	4,497,479	2.314	24,187	1,943,595	12,445	12,216	199,277	61,303
2029	4,543,795	2.302	24,510	1,973,847	12,417	12,330	201,217	61,278
2030	4,589,173	2.291	24,781	2,003,131	12,371	12,433	203,092	61,219
2031	4,635,578	2.281	25,093	2,032,257	12,347	12,554	204,952	61,252

DUKE ENERGY FLORIDA

SCHEDULE 2.1.3
HISTORY AND FORECAST OF ENERGY CONSUMPTION AND
NUMBER OF CUSTOMERS BY CUSTOMER CLASS
LOW CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	RURAL AND RESIDENTIAL					COMMERCIAL		
YEAR	DEF POPULATION	MEMBERS PER HOUSEHOLD	GWh	AVERAGE NO. OF CUSTOMERS	AVERAGE KWh CONSUMPTION PER CUSTOMER	GWh	AVERAGE NO. OF CUSTOMERS	AVERAGE KWh CONSUMPTION PER CUSTOMER
HISTORY:								
2012	3,641,179	2.496	18,251	1,458,690	12,512	11,723	163,297	71,792
2013	3,713,013	2.495	18,508	1,488,159	12,437	11,718	165,936	70,617
2014	3,747,160	2.492	19,003	1,503,758	12,637	11,789	167,253	70,485
2015	3,794,138	2.489	19,932	1,524,605	13,074	12,070	169,147	71,359
2016	3,837,436	2.485	20,265	1,543,967	13,126	12,094	170,999	70,724
2017	3,906,975	2.483	19,791	1,573,260	12,579	11,918	173,695	68,612
2018	3,968,241	2.485	20,636	1,597,132	12,920	12,172	175,848	69,216
2019	4,037,435	2.483	20,775	1,626,117	12,776	12,198	178,036	68,514
2020	4,089,498	2.471	21,459	1,655,304	12,964	11,522	179,666	64,129
2021	4,130,929	2.448	21,192	1,687,471	12,558	11,785	182,195	64,686
FORECAST:								
2022	4,124,494	2.424	18,901	1,701,524	11,108	10,942	183,391	59,662
2023	4,101,605	2.402	18,586	1,707,579	10,885	11,052	184,043	60,052
2024	4,074,906	2.382	18,480	1,710,708	10,803	11,214	184,370	60,826
2025	4,054,618	2.362	18,452	1,716,604	10,749	11,277	184,810	61,022
2026	4,054,100	2.344	18,569	1,729,565	10,736	11,304	185,663	60,884
2027	4,069,956	2.328	18,760	1,748,263	10,731	11,318	186,883	60,559
2028	4,096,822	2.314	18,975	1,770,450	10,718	11,373	188,318	60,394
2029	4,128,547	2.302	19,194	1,793,461	10,702	11,458	189,799	60,371
2030	4,157,462	2.291	19,353	1,814,693	10,665	11,535	191,164	60,339
2031	4,180,258	2.281	19,511	1,832,643	10,647	11,631	192,317	60,477

DUKE ENERGY FLORIDA

SCHEDULE 2.2.1
HISTORY AND FORECAST OF ENERGY CONSUMPTION AND
NUMBER OF CUSTOMERS BY CUSTOMER CLASS
BASE CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	INDUSTRIAL						
YEAR	GWh	AVERAGE NO. OF CUSTOMERS	AVERAGE KWh CONSUMPTION PER CUSTOMER	RAILROADS AND RAILWAYS GWh	STREET & HIGHWAY LIGHTING GWh	OTHER SALES TO PUBLIC AUTHORITIES GWh	TOTAL SALES TO ULTIMATE CONSUMERS GWh
HISTORY:							
2012	3,160	2,372	1,332,209	0	25	3,221	36,381
2013	3,206	2,343	1,368,331	0	25	3,159	36,616
2014	3,267	2,280	1,432,895	0	25	3,157	37,240
2015	3,293	2,243	1,468,123	0	24	3,234	38,553
2016	3,197	2,178	1,467,860	0	24	3,194	38,774
2017	3,120	2,137	1,459,991	0	24	3,171	38,023
2018	3,107	2,080	1,493,750	0	24	3,206	39,144
2019	2,963	2,025	1,463,210	0	24	3,227	39,187
2020	3,147	1,999	1,574,287	0	23	3,079	39,230
2021	3,292	1,978	1,664,307	0	24	3,158	39,451
FORECAST:							
2022	3,523	1,959	1,798,231	0	22	3,213	39,582
2023	3,610	1,942	1,859,285	0	22	3,222	39,840
2024	3,629	1,930	1,880,847	0	21	3,236	40,020
2025	3,639	1,919	1,896,581	0	21	3,246	40,381
2026	3,622	1,907	1,899,833	0	21	3,255	40,393
2027	3,632	1,895	1,917,137	0	21	3,268	40,867
2028	3,635	1,883	1,931,170	0	21	3,279	41,206
2029	3,643	1,871	1,947,846	0	21	3,293	41,662
2030	3,649	1,865	1,956,502	0	21	3,306	41,969
2031	3,658	1,865	1,961,255	0	21	3,320	42,391

DUKE ENERGY FLORIDA

SCHEDULE 2.2.2
HISTORY AND FORECAST OF ENERGY CONSUMPTION AND
NUMBER OF CUSTOMERS BY CUSTOMER CLASS
HIGH CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	INDUSTRIAL						
YEAR	GWh	AVERAGE NO. OF CUSTOMERS	AVERAGE KWh CONSUMPTION PER CUSTOMER	RAILROADS AND RAILWAYS GWh	STREET & HIGHWAY LIGHTING GWh	OTHER SALES TO PUBLIC AUTHORITIES GWh	TOTAL SALES TO ULTIMATE CONSUMERS GWh
HISTORY:							
2012	3,160	2,372	1,332,209	0	25	3,221	36,381
2013	3,206	2,343	1,368,331	0	25	3,159	36,616
2014	3,267	2,280	1,432,895	0	25	3,157	37,240
2015	3,293	2,243	1,468,123	0	24	3,234	38,553
2016	3,197	2,178	1,467,860	0	24	3,194	38,774
2017	3,120	2,137	1,459,991	0	24	3,171	38,023
2018	3,107	2,080	1,493,750	0	24	3,206	39,144
2019	2,963	2,025	1,463,210	0	24	3,227	39,187
2020	3,147	1,999	1,574,287	0	23	3,079	39,230
2021	3,292	1,978	1,664,307	0	24	3,158	39,451
FORECAST:							
2022	3,557	1,959	1,815,535	0	22	3,263	41,512
2023	3,637	1,942	1,873,240	0	22	3,268	41,694
2024	3,659	1,930	1,896,242	0	21	3,281	42,016
2025	3,658	1,919	1,906,531	0	21	3,290	42,285
2026	3,656	1,907	1,917,578	0	21	3,302	42,615
2027	3,657	1,895	1,930,582	0	21	3,313	42,982
2028	3,663	1,883	1,945,718	0	21	3,325	43,413
2029	3,670	1,871	1,962,025	0	21	3,338	43,869
2030	3,677	1,865	1,971,706	0	21	3,352	44,265
2031	3,684	1,865	1,975,531	0	21	3,365	44,717

DUKE ENERGY FLORIDA

SCHEDULE 2.2.3
HISTORY AND FORECAST OF ENERGY CONSUMPTION AND
NUMBER OF CUSTOMERS BY CUSTOMER CLASS
LOW CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	INDUSTRIAL						
YEAR	GWh	AVERAGE NO. OF CUSTOMERS	AVERAGE KWh CONSUMPTION PER CUSTOMER	RAILROADS AND RAILWAYS GWh	STREET & HIGHWAY LIGHTING GWh	OTHER SALES TO PUBLIC AUTHORITIES GWh	TOTAL SALES TO ULTIMATE CONSUMERS GWh
HISTORY:							
2012	3,160	2,372	1,332,209	0	25	3,221	36,381
2013	3,206	2,343	1,368,331	0	25	3,159	36,616
2014	3,267	2,280	1,432,895	0	25	3,157	37,240
2015	3,293	2,243	1,468,123	0	24	3,234	38,553
2016	3,197	2,178	1,467,860	0	24	3,194	38,774
2017	3,120	2,137	1,459,991	0	24	3,171	38,023
2018	3,107	2,080	1,493,750	0	24	3,206	39,144
2019	2,963	2,025	1,463,210	0	24	3,227	39,187
2020	3,147	1,999	1,574,287	0	23	3,079	39,230
2021	3,292	1,978	1,664,307	0	24	3,158	39,451
FORECAST:							
2022	3,420	1,959	1,745,994	0	22	3,139	36,424
2023	3,517	1,942	1,811,413	0	22	3,154	36,331
2024	3,561	1,930	1,845,516	0	21	3,172	36,449
2025	3,567	1,919	1,859,507	0	21	3,180	36,498
2026	3,572	1,907	1,873,328	0	21	3,191	36,657
2027	3,576	1,895	1,887,375	0	21	3,204	36,879
2028	3,580	1,883	1,901,913	0	21	3,217	37,167
2029	3,587	1,871	1,917,582	0	21	3,230	37,491
2030	3,594	1,865	1,926,936	0	21	3,244	37,747
2031	3,601	1,865	1,930,588	0	21	3,258	38,022

DUKE ENERGY FLORIDA

SCHEDULE 2.3.1
HISTORY AND FORECAST OF ENERGY CONSUMPTION AND
NUMBER OF CUSTOMERS BY CUSTOMER CLASS
BASE CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)
YEAR	SALES FOR RESALE GWh	UTILITY USE & LOSSES GWh	NET ENERGY FOR LOAD GWh	OTHER CUSTOMERS (AVERAGE NO.)	TOTAL NO. OF CUSTOMERS
HISTORY:					
2012	1,768	3,065	41,214	25,480	1,649,839
2013	1,488	2,668	40,772	25,759	1,682,197
2014	1,333	2,402	40,975	25,800	1,699,091
2015	1,243	2,484	42,280	25,866	1,721,861
2016	1,803	2,277	42,854	26,005	1,743,149
2017	2,196	2,700	42,919	26,248	1,775,340
2018	2,304	2,776	44,224	26,504	1,801,564
2019	2,910	2,704	44,801	26,707	1,832,885
2020	2,887	2,697	44,814	26,845	1,863,814
2021	3,302	2,311	45,064	27,082	1,898,726
FORECAST:					
2022	1,428	2,430	43,440	27,255	1,936,334
2023	1,279	2,314	43,432	27,464	1,973,754
2024	1,277	2,452	43,750	27,672	2,010,971
2025	915	2,199	43,495	27,884	2,048,074
2026	915	2,468	43,776	28,095	2,083,978
2027	910	2,342	44,120	28,307	2,117,851
2028	900	2,496	44,602	28,520	2,149,784
2029	897	2,406	44,966	28,731	2,179,734
2030	897	2,462	45,328	28,938	2,208,189
2031	35	2,447	44,872	29,145	2,235,216

DUKE ENERGY FLORIDA

SCHEDULE 2.3.2
HISTORY AND FORECAST OF ENERGY CONSUMPTION AND
NUMBER OF CUSTOMERS BY CUSTOMER CLASS
HIGH CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)
YEAR	SALES FOR RESALE GWh	UTILITY USE & LOSSES GWh	NET ENERGY FOR LOAD GWh	OTHER CUSTOMERS (AVERAGE NO.)	TOTAL NO. OF CUSTOMERS
HISTORY:					
2012	1,768	3,065	41,214	25,480	1,649,839
2013	1,488	2,668	40,772	25,759	1,682,197
2014	1,333	2,402	40,975	25,800	1,699,091
2015	1,243	2,484	42,280	25,866	1,721,861
2016	1,803	2,277	42,854	26,005	1,743,149
2017	2,196	2,700	42,919	26,248	1,775,340
2018	2,304	2,776	44,224	26,504	1,801,564
2019	2,910	2,704	44,801	26,707	1,832,885
2020	2,887	2,697	44,814	26,845	1,863,814
2021	3,302	2,311	45,064	27,082	1,898,726
FORECAST:					
2022	1,428	2,880	45,820	27,248	1,936,763
2023	1,279	2,895	45,869	27,458	1,977,493
2024	1,277	2,982	46,276	27,667	2,020,500
2025	915	2,935	46,135	27,879	2,062,690
2026	915	2,966	46,496	28,091	2,102,497
2027	910	2,986	46,878	28,303	2,139,109
2028	900	3,078	47,391	28,516	2,173,271
2029	897	3,043	47,810	28,727	2,205,661
2030	897	3,070	48,232	28,935	2,237,022
2031	35	3,097	47,849	29,142	2,268,216

DUKE ENERGY FLORIDA

SCHEDULE 2.3.3
HISTORY AND FORECAST OF ENERGY CONSUMPTION AND
NUMBER OF CUSTOMERS BY CUSTOMER CLASS
LOW CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)
YEAR	SALES FOR RESALE GWh	UTILITY USE & LOSSES GWh	NET ENERGY FOR LOAD GWh	OTHER CUSTOMERS (AVERAGE NO.)	TOTAL NO. OF CUSTOMERS
HISTORY:					
2012	1,768	3,065	41,214	25,480	1,649,839
2013	1,488	2,668	40,772	25,759	1,682,197
2014	1,333	2,402	40,975	25,800	1,699,091
2015	1,243	2,484	42,280	25,866	1,721,861
2016	1,803	2,277	42,854	26,005	1,743,149
2017	2,196	2,700	42,919	26,248	1,775,340
2018	2,304	2,776	44,224	26,504	1,801,564
2019	2,910	2,704	44,801	26,707	1,832,885
2020	2,887	2,697	44,814	26,845	1,863,814
2021	3,302	2,311	45,064	27,082	1,898,726
FORECAST:					
2022	1,428	2,043	39,894	27,248	1,914,122
2023	1,279	2,031	39,642	27,458	1,921,021
2024	1,277	2,094	39,821	27,667	1,924,675
2025	915	2,033	39,446	27,879	1,931,212
2026	915	2,049	39,621	28,091	1,945,225
2027	910	2,055	39,844	28,303	1,965,343
2028	900	2,129	40,195	28,516	1,989,166
2029	897	2,085	40,473	28,727	2,013,858
2030	897	2,098	40,742	28,935	2,036,657
2031	35	2,110	40,167	29,142	2,055,967

DUKE ENERGY FLORIDA

SCHEDULE 3.1.1
HISTORY AND FORECAST OF SUMMER PEAK DEMAND (MW)
BASE CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(OTH)	(10)
YEAR	TOTAL	WHOLESALE	RETAIL	INTERRUPTIBLE	RESIDENTIAL LOAD MANAGEMENT	RESIDENTIAL CONSERVATION	COMM. / IND. LOAD MANAGEMENT	COMM. / IND. CONSERVATION	OTHER DEMAND REDUCTIONS	NET FIRM DEMAND
HISTORY:										
2012	9,788	1080	8,708	262	328	358	98	280	124	8,337
2013	9,581	581	9,000	317	341	382	101	298	124	8,017
2014	10,067	814	9,253	232	355	404	108	313	132	8,523
2015	10,058	772	9,286	303	360	435	124	324	80	8,431
2016	10,530	893	9,637	235	366	466	100	339	80	8,946
2017	10,220	808	9,412	203	342	498	95	349	80	8,653
2018	10,271	812	9,459	257	386	532	83	387	80	8,545
2019	11,029	1021	10,008	230	394	566	86	414	80	9,260
2020	10,765	901	9,864	250	393	599	83	440	80	8,921
2021	10,835	1,010	9,825	375	394	623	85	451	80	8,826
FORECAST:										
2022	10,832	904	9,928	346	395	650	88	453	80	8,821
2023	10,628	661	9,967	347	396	676	91	455	80	8,583
2024	10,725	661	10,063	346	397	702	95	457	80	8,648
2025	10,578	461	10,117	341	398	726	98	460	80	8,475
2026	10,655	461	10,194	341	399	749	101	462	80	8,523
2027	10,744	461	10,282	341	400	772	104	464	80	8,582
2028	10,856	461	10,395	341	401	794	107	466	80	8,667
2029	10,951	461	10,490	341	402	815	111	469	80	8,733
2030	11,043	461	10,582	341	403	835	114	471	80	8,798
2031	11,091	411	10,681	302	404	855	117	473	80	8,861

Historical Values (2012 - 2021):

Col. (2) = recorded peak + implemented load control + residential and commercial/industrial conservation and customer-owned self-service cogeneration.

Cols. (5) - (9) = Represent total cumulative capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) =Customer-owned self-service cogeneration.

Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

Projected Values (2022 - 2031):

Cols. (2) - (4) = forecasted peak without load control, cumulative conservation, and customer-owned self-service cogeneration.

Cols. (5) - (9) = cumulative conservation and load control capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) = customer-owned self-service cogeneration.

Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

DUKE ENERGY FLORIDA

SCHEDULE 3.1.2
HISTORY AND FORECAST OF SUMMER PEAK DEMAND (MW)
HIGH CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(OTH)	(10)
YEAR	TOTAL	WHOLESALE	RETAIL	INTERRUPTIBLE	RESIDENTIAL LOAD MANAGEMENT	RESIDENTIAL CONSERVATION	COMM. / IND. LOAD MANAGEMENT	COMM. / IND. CONSERVATION	OTHER DEMAND REDUCTIONS	NET FIRM DEMAND
HISTORY:										
2012	9,788	1,080	8,708	262	328	358	98	280	124	8,337
2013	9,581	581	9,000	317	341	382	101	298	124	8,017
2014	10,067	814	9,253	232	355	404	108	313	132	8,523
2015	10,058	772	9,286	303	360	435	124	324	80	8,431
2016	10,530	893	9,637	235	366	466	100	339	80	8,946
2017	10,220	808	9,412	203	342	498	95	349	80	8,653
2018	10,271	812	9,459	257	386	532	83	387	80	8,545
2019	11,029	1,021	10,008	230	394	566	86	414	80	9,260
2020	10,765	901	9,864	250	393	599	83	440	80	8,921
2021	10,835	1,010	9,825	375	394	623	85	451	80	8,826
FORECAST:										
2022	10,924	904	10,020	346	395	650	88	453	80	8,913
2023	10,745	661	10,083	347	396	676	91	455	80	8,700
2024	10,834	661	10,172	346	397	702	95	457	80	8,757
2025	10,695	461	10,234	341	398	726	98	460	80	8,592
2026	10,783	461	10,322	341	399	749	101	462	80	8,651
2027	10,874	461	10,413	341	400	772	104	464	80	8,713
2028	10,987	461	10,526	341	401	794	107	466	80	8,797
2029	11,086	461	10,625	341	402	815	111	469	80	8,868
2030	11,183	461	10,722	341	403	835	114	471	80	8,939
2031	11,241	411	10,830	302	404	855	117	473	80	9,011

Historical Values (2012 - 2021):

Col. (2) = recorded peak + implemented load control + residential and commercial/industrial conservation and customer-owned self-service cogeneration.

Cols. (5) - (9) = Represent total cumulative capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) =Customer-owned self-service cogeneration.

Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

Projected Values (2022 - 2031):

Cols. (2) - (4) = forecasted peak without load control, cumulative conservation, and customer-owned self-service cogeneration.

Cols. (5) - (9) = cumulative conservation and load control capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) = customer-owned self-service cogeneration.

Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

DUKE ENERGY FLORIDA

SCHEDULE 3.1.3

HISTORY AND FORECAST OF SUMMER PEAK DEMAND (MW)

LOW CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(OTH)	(10)
YEAR	TOTAL	WHOLESALE	RETAIL	INTERRUPTIBLE	RESIDENTIAL LOAD MANAGEMENT	RESIDENTIAL CONSERVATION	COMM. / IND. LOAD MANAGEMENT	COMM. / IND. CONSERVATION	OTHER DEMAND REDUCTIONS	NET FIRM DEMAND
HISTORY:										
2012	9,788	1,080	8,708	262	328	358	98	280	124	8,337
2013	9,581	581	9,000	317	341	382	101	298	124	8,017
2014	10,067	814	9,253	232	355	404	108	313	132	8,523
2015	10,058	772	9,286	303	360	435	124	324	80	8,431
2016	10,530	893	9,637	235	366	466	100	339	80	8,946
2017	10,220	808	9,412	203	342	498	95	349	80	8,653
2018	10,271	812	9,459	257	386	532	83	387	80	8,545
2019	11,029	1,021	10,008	230	394	566	86	414	80	9,260
2020	10,765	901	9,864	250	393	599	83	440	80	8,921
2021	10,835	1,010	9,825	375	394	623	85	451	80	8,826
FORECAST:										
2022	9,841	904	8,937	346	395	650	88	453	80	7,829
2023	9,601	661	8,940	347	396	676	91	455	80	7,556
2024	9,645	661	8,983	346	397	702	95	457	80	7,568
2025	9,459	461	8,997	341	398	726	98	460	80	7,356
2026	9,509	461	9,048	341	399	749	101	462	80	7,377
2027	9,570	461	9,109	341	400	772	104	464	80	7,409
2028	9,648	461	9,187	341	401	794	107	466	80	7,458
2029	9,719	461	9,258	341	402	815	111	469	80	7,501
2030	9,785	461	9,324	341	403	835	114	471	80	7,541
2031	9,805	411	9,394	302	404	855	117	473	80	7,575

Historical Values (2012 - 2021):

Col. (2) = recorded peak + implemented load control + residential and commercial/industrial conservation and customer-owned self-service cogeneration.

Cols. (5) - (9) = Represent total cumulative capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) =Customer-owned self-service cogeneration.

Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

Projected Values (2022 - 2031):

Cols. (2) - (4) = forecasted peak without load control, cumulative conservation, and customer-owned self-service cogeneration.

Cols. (5) - (9) = cumulative conservation and load control capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) = customer-owned self-service cogeneration.

Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

DUKE ENERGY FLORIDA

SCHEDULE 3.2.1

HISTORY AND FORECAST OF WINTER PEAK DEMAND (MW)

BASE CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(OTH)	(10)
YEAR	TOTAL	WHOLESALE	RETAIL	INTERRUPTIBLE	RESIDENTIAL LOAD MANAGEMENT	RESIDENTIAL CONSERVATION	COMM. / IND. LOAD MANAGEMENT	COMM. / IND. CONSERVATION	OTHER DEMAND REDUCTIONS	NET FIRM DEMAND
HISTORY:										
2011/12	9,721	905	8,816	186	643	686	96	203	206	7,701
2012/13	9,109	831	8,278	287	652	747	97	220	213	6,893
2013/14	9,467	658	8,809	257	654	785	101	229	219	7,222
2014/15	10,648	1035	9,613	273	658	815	109	236	237	8,319
2015/16	9,678	1275	8,403	207	675	845	131	240	170	7,409
2016/17	8,739	701	8,038	191	695	878	79	243	165	6,489
2017/18	11,559	1071	10,488	244	699	913	79	246	196	9,182
2018/19	8,527	572	7,955	239	711	948	82	251	164	6,132
2019/20	9,725	613	9,112	292	670	982	80	256	177	7,268
2020/21	9,654	679	8,975	319	671	1,006	82	260	175	7,141
FORECAST:										
2021/22	11,314	1,049	10,265	323	672	1,033	84	263	191	8,748
2022/23	11,594	1,264	10,330	324	673	1,060	88	266	191	8,993
2023/24	11,695	1,264	10,431	323	674	1,086	91	268	192	9,061
2024/25	11,543	1,063	10,480	319	675	1,110	94	271	192	8,882
2025/26	11,621	1,063	10,557	319	676	1,133	97	274	193	8,929
2026/27	11,710	1,063	10,647	319	677	1,155	100	277	194	8,988
2027/28	11,225	462	10,763	319	678	1,177	103	280	195	8,472
2028/29	11,311	462	10,849	319	679	1,198	107	283	196	8,529
2029/30	11,391	462	10,929	319	680	1,219	110	285	197	8,582
2029/31	11,427	412	11,016	282	681	1,238	113	288	197	8,628

Historical Values (2012 - 2021):

Col. (2) = recorded peak + implemented load control + residential and commercial/industrial conservation and customer-owned self-service cogeneration.

Cols. (5) - (9) = Represent total cumulative capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) = Voltage reduction and customer-owned self-service cogeneration.

Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

Projected Values (2022 - 2031):

Cols. (2) - (4) = forecasted peak without load control, cumulative conservation, and customer-owned self-service cogeneration.

Cols. (5) - (9) = Represent cumulative conservation and load control capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) = Voltage reduction and customer-owned self-service cogeneration.

Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

DUKE ENERGY FLORIDA

SCHEDULE 3.2.2
HISTORY AND FORECAST OF WINTER PEAK DEMAND (MW)
HIGH CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(OTH)	(10)
YEAR	TOTAL	WHOLESALE	RETAIL	INTERRUPTIBLE	RESIDENTIAL LOAD MANAGEMENT	RESIDENTIAL CONSERVATION	COMM. / IND. LOAD MANAGEMENT	COMM. / IND. CONSERVATION	OTHER DEMAND REDUCTIONS	NET FIRM DEMAND
HISTORY:										
2011/12	9,721	905	8,816	186	643	686	96	203	206	7,701
2012/13	9,109	831	8,278	287	652	747	97	220	213	6,893
2013/14	9,467	658	8,809	257	654	785	101	229	219	7,222
2014/15	10,648	1,035	9,613	273	658	815	109	236	237	8,319
2015/16	9,678	1,275	8,403	207	675	845	131	240	170	7,409
2016/17	8,739	701	8,038	191	695	878	79	243	165	6,489
2017/18	11,559	1,071	10,488	244	699	913	79	246	196	9,182
2018/19	8,527	572	7,955	239	711	948	82	251	164	6,132
2019/20	9,725	613	9,112	292	670	982	80	256	177	7,268
2020/21	9,654	679	8,975	319	671	1,006	82	260	175	7,141
FORECAST:										
2021/22	13,296	1,049	12,246	323	672	1,033	84	263	191	10,729
2022/23	13,612	1,264	12,348	324	673	1,060	88	266	191	11,011
2023/24	13,754	1,264	12,490	323	674	1,086	91	268	192	11,120
2024/25	13,641	1,063	12,578	319	675	1,110	94	271	192	10,980
2025/26	13,749	1,063	12,686	319	676	1,133	97	274	193	11,058
2026/27	13,861	1,063	12,798	319	677	1,155	100	277	194	11,139
2027/28	13,395	462	12,933	319	678	1,177	103	280	195	10,642
2028/29	13,507	462	13,045	319	679	1,198	107	283	196	10,725
2029/30	13,613	462	13,151	319	680	1,219	110	285	197	10,803
2030/31	13,678	412	13,266	282	681	1,238	113	288	197	10,878

Historical Values (2012 - 2021):

Col. (2) = recorded peak + implemented load control + residential and commercial/industrial conservation and customer-owned self-service cogeneration.

Cols. (5) - (9) = Represent total cumulative capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) = Voltage reduction and customer-owned self-service cogeneration.

Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

Projected Values (2022 - 2031):

Cols. (2) - (4) = forecasted peak without load control, cumulative conservation, and customer-owned self-service cogeneration.

Cols. (5) - (9) = Represent cumulative conservation and load control capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) = Voltage reduction and customer-owned self-service cogeneration.

Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

DUKE ENERGY FLORIDA

SCHEDULE 3.2.3

HISTORY AND FORECAST OF WINTER PEAK DEMAND (MW)

LOW CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(OTH)	(10)
YEAR	TOTAL	WHOLESALE	RETAIL	INTERRUPTIBLE	RESIDENTIAL LOAD MANAGEMENT	RESIDENTIAL CONSERVATION	COMM. / IND. LOAD MANAGEMENT	COMM. / IND. CONSERVATION	OTHER DEMAND REDUCTIONS	NET FIRM DEMAND
HISTORY:										
2011/12	9,721	905	8,816	186	643	686	96	203	206	7,701
2012/13	9,109	831	8,278	287	652	747	97	220	213	6,893
2013/14	9,467	658	8,809	257	654	785	101	229	219	7,222
2014/15	10,648	1,035	9,613	273	658	815	109	236	237	8,319
2015/16	9,678	1,275	8,403	207	675	845	131	240	170	7,409
2016/17	8,739	701	8,038	191	695	878	79	243	165	6,489
2017/18	11,559	1,071	10,488	244	699	913	79	246	196	9,182
2018/19	8,527	572	7,955	239	711	948	82	251	164	6,132
2019/20	9,725	613	9,112	292	670	982	80	256	177	7,268
2020/21	9,654	679	8,975	319	671	1,006	82	260	175	7,141
FORECAST:										
2021/22	10,135	1,049	9,086	323	672	1,033	84	263	191	7,569
2022/23	10,316	1,264	9,052	324	673	1,060	88	266	191	7,715
2023/24	10,361	1,264	9,097	323	674	1,086	91	268	192	7,727
2024/25	10,169	1,063	9,106	319	675	1,110	94	271	192	7,508
2025/26	10,213	1,063	9,150	319	676	1,133	97	274	193	7,521
2026/27	10,272	1,063	9,209	319	677	1,155	100	277	194	7,550
2027/28	9,754	462	9,292	319	678	1,177	103	280	195	7,002
2028/29	9,820	462	9,358	319	679	1,198	107	283	196	7,038
2029/30	9,878	462	9,416	319	680	1,219	110	285	197	7,069
2030/31	9,888	412	9,476	282	681	1,238	113	288	197	7,088

Historical Values (2012 - 2021):

Col. (2) = recorded peak + implemented load control + residential and commercial/industrial conservation and customer-owned self-service cogeneration.

Cols. (5) - (9) = Represent total cumulative capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) = Voltage reduction and customer-owned self-service cogeneration.

Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

Projected Values (2022 - 2031):

Cols. (2) - (4) = forecasted peak without load control, cumulative conservation, and customer-owned self-service cogeneration.

Cols. (5) - (9) = Represent cumulative conservation and load control capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) = Voltage reduction and customer-owned self-service cogeneration.

Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

DUKE ENERGY FLORIDA

SCHEDULE 3.3.1
HISTORY AND FORECAST OF ANNUAL NET ENERGY FOR LOAD (GWh)
BASE CASE FORECAST

(1) YEAR	(2) TOTAL	(3) RESIDENTIAL CONSERVATION	(4) COMM. / IND. CONSERVATION	(OTH) OTHER ENERGY REDUCTIONS	(5) RETAIL	(6) WHOLESALE	(7) UTILITY USE & LOSSES	(8) NET ENERGY FOR LOAD	(9) LOAD FACTOR (%) *
HISTORY:									
2012	43,396	733	669	780	36,381	1,768	3,065	41,214	52.1
2013	43,142	772	734	864	36,616	1,488	2,668	40,772	53.0
2014	43,443	812	791	864	37,240	1,333	2,402	40,975	50.7
2015	44,552	848	829	595	38,553	1,243	2,484	42,280	50.9
2016	45,200	892	857	596	38,774	1,803	2,277	42,854	50.6
2017	45,318	933	871	595	38,024	2,196	2,699	42,919	52.7
2018	46,729	977	933	595	39,145	2,304	2,775	44,224	48.9
2019	47,385	1,017	972	595	39,187	2,910	2,704	44,801	51.3
2020	47,476	1,050	1,016	596	39,230	2,887	2,697	44,814	52.9
2021	47,786	1,100	1,027	595	39,451	3,302	2,311	45,064	53.1
FORECAST:									
2022	46,221	1,149	1,037	595	39,582	1,428	2,430	43,440	56.2
2023	46,273	1,198	1,047	595	39,840	1,279	2,314	43,432	55.1
2024	46,649	1,247	1,056	596	40,020	1,277	2,452	43,750	55.0
2025	46,449	1,288	1,071	595	40,381	915	2,199	43,495	55.9
2026	46,783	1,331	1,081	595	40,393	915	2,468	43,776	56.0
2027	47,177	1,372	1,090	595	40,867	910	2,342	44,120	56.0
2028	47,710	1,412	1,100	596	41,206	900	2,496	44,602	58.6
2029	48,122	1,451	1,109	595	41,662	897	2,406	44,966	58.8
2030	48,530	1,488	1,119	595	41,969	897	2,462	45,328	58.8
2031	48,119	1,524	1,128	595	42,391	35	2,447	44,872	57.8

* Load Factors for historical years are calculated using the actual and projected annual peak.

DUKE ENERGY FLORIDA

SCHEDULE 3.3.2

HISTORY AND FORECAST OF ANNUAL NET ENERGY FOR LOAD (GWh)

HIGH CASE FORECAST

(1)	(2)	(3)	(4)	(OTH)	(5)	(6)	(7)	(8)	(9)
YEAR	TOTAL	RESIDENTIAL CONSERVATION	COMM. / IND. CONSERVATION	OTHER ENERGY REDUCTIONS	RETAIL	WHOLESALE	UTILITY USE & LOSSES	NET ENERGY FOR LOAD	LOAD FACTOR (%) *
HISTORY:									
2012	43,396	733	669	780	36,381	1,768	3,065	41,214	52.1
2013	43,142	772	734	864	36,616	1,488	2,668	40,772	53.0
2014	43,443	812	791	864	37,240	1,333	2,402	40,975	50.7
2015	44,552	848	829	595	38,553	1,243	2,484	42,280	50.9
2016	45,200	892	857	596	38,774	1,803	2,277	42,854	50.6
2017	45,318	933	871	595	38,024	2,196	2,699	42,919	52.7
2018	46,729	977	933	595	39,145	2,304	2,775	44,224	48.9
2019	47,385	1,017	972	595	39,187	2,910	2,704	44,801	51.3
2020	47,476	1,050	1,016	596	39,230	2,887	2,697	44,814	52.9
2021	47,786	1,100	1,027	595	39,451	3,302	2,311	45,064	53.1
FORECAST:									
2022	48,601	1,149	1,037	595	41,512	1,428	2,880	45,820	48.7
2023	48,709	1,198	1,047	595	41,694	1,279	2,895	45,869	47.6
2024	49,174	1,247	1,056	595	42,016	1,277	2,982	46,276	47.5
2025	49,089	1,288	1,071	595	42,285	915	2,935	46,135	48.0
2026	49,502	1,331	1,081	595	42,615	915	2,966	46,496	48.0
2027	49,936	1,372	1,090	595	42,982	910	2,986	46,878	48.0
2028	50,499	1,412	1,100	596	43,413	900	3,078	47,391	50.7
2029	50,965	1,451	1,109	595	43,869	897	3,043	47,810	50.9
2030	51,434	1,488	1,119	595	44,265	897	3,070	48,232	51.0
2031	51,095	1,524	1,128	595	44,717	35	3,097	47,849	50.2

* Load Factors for historical years are calculated using the actual and projected annual peak.

DUKE ENERGY FLORIDA

SCHEDULE 3.3.3

HISTORY AND FORECAST OF ANNUAL NET ENERGY FOR LOAD (GWh)

LOW CASE FORECAST

(1)	(2)	(3)	(4)	(OTH)	(5)	(6)	(7)	(8)	(9)
YEAR	TOTAL	RESIDENTIAL CONSERVATION	COMM. / IND. CONSERVATION	OTHER ENERGY REDUCTIONS	RETAIL	WHOLESALE	UTILITY USE & LOSSES	NET ENERGY FOR LOAD	LOAD FACTOR (%) *
HISTORY:									
2012	43,396	733	669	780	36,381	1,768	3,065	41,214	52.1
2013	43,142	772	734	864	36,616	1,488	2,668	40,772	53.0
2014	43,443	812	791	864	37,240	1,333	2,402	40,975	50.7
2015	44,552	848	829	595	38,553	1,243	2,484	42,280	50.9
2016	45,200	892	857	596	38,774	1,803	2,277	42,854	50.6
2017	45,318	933	871	595	38,024	2,196	2,699	42,919	52.7
2018	46,729	977	933	595	39,145	2,304	2,775	44,224	48.9
2019	47,385	1,017	972	595	39,187	2,910	2,704	44,801	51.3
2020	47,476	1,050	1,016	596	39,230	2,887	2,697	44,814	52.9
2021	47,786	1,100	1,027	595	39,451	3,302	2,311	45,064	53.1
FORECAST:									
2022	42,676	1,149	1,037	595	36,424	1,428	2,043	39,894	58.2
2023	42,482	1,198	1,047	595	36,331	1,279	2,031	39,642	58.7
2024	42,720	1,247	1,056	596	36,449	1,277	2,094	39,821	58.7
2025	42,400	1,288	1,071	595	36,498	915	2,033	39,446	60.0
2026	42,627	1,331	1,081	595	36,657	915	2,049	39,621	60.1
2027	42,902	1,372	1,090	595	36,879	910	2,055	39,844	60.2
2028	43,303	1,412	1,100	596	37,167	900	2,129	40,195	61.4
2029	43,629	1,451	1,109	595	37,491	897	2,085	40,473	61.6
2030	43,944	1,488	1,119	595	37,747	897	2,098	40,742	61.7
2031	43,413	1,524	1,128	595	38,022	35	2,110	40,167	60.5

* Load Factors for historical years are calculated using the actual and projected annual peak.

DUKE ENERGY FLORIDA

SCHEDULE 4.1
PREVIOUS YEAR ACTUAL AND TWO-YEAR FORECAST OF PEAK DEMAND
AND NET ENERGY FOR LOAD BY MONTH
BASE CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	A C T U A L		F O R E C A S T		F O R E C A S T	
	2021		2022		2023	
MONTH	PEAK DEMAND MW	NEL GWh	PEAK DEMAND MW	NEL GWh	PEAK DEMAND MW	NEL GWh
JANUARY	**7,052**	3,268	**9,938**	3,224	**10,189**	3,263
FEBRUARY	8,308	2,857	8,946	2,880	9,196	2,877
MARCH	7,565	3,164	7,598	3,176	7,803	3,098
APRIL	7,871	3,245	7,581	3,282	7,314	3,182
MAY	8,735	4,034	8,900	3,802	8,662	3,852
JUNE	9,147	4,375	9,511	4,161	9,247	4,209
JULY	9,452	4,707	9,444	4,448	9,212	4,484
AUGUST	**9,681**	4,865	**9,650**	4,427	**9,417**	4,460
SEPTEMBER	8,770	4,309	9,235	4,140	8,989	4,164
OCTOBER	8,701	4,061	8,576	3,616	8,342	3,634
NOVEMBER	6,198	2,931	7,680	3,075	7,437	3,004
DECEMBER	6,210	3,250	8,440	3,210	8,662	3,206
TOTAL		45,064		43,440		43,432

NOTE: Recorded Net Peak demands and NEL include off-system wholesale contracts.

DUKE ENERGY FLORIDA

SCHEDULE 4.2
PREVIOUS YEAR ACTUAL AND TWO-YEAR FORECAST OF PEAK DEMAND
AND NET ENERGY FOR LOAD BY MONTH
HIGH CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	ACTUAL		FORECAST		FORECAST	
	2021		2022		2023	
MONTH	PEAK DEMAND MW	NEL GWh	PEAK DEMAND MW	NEL GWh	PEAK DEMAND MW	NEL GWh
JANUARY	**7,052**	3,268	**11,919**	3,531	**12,207**	3,583
FEBRUARY	8,308	2,857	10,328	3,166	10,604	3,173
MARCH	7,565	3,164	8,197	3,346	8,412	3,274
APRIL	7,871	3,245	7,811	3,463	7,563	3,367
MAY	8,735	4,034	9,093	3,966	8,858	4,019
JUNE	9,147	4,375	9,662	4,301	9,398	4,351
JULY	9,452	4,707	9,552	4,534	9,323	4,572
AUGUST	**9,681**	4,865	**9,742**	4,520	**9,534**	4,555
SEPTEMBER	8,770	4,309	9,394	4,242	9,150	4,267
OCTOBER	8,701	4,061	8,792	3,803	8,560	3,823
NOVEMBER	6,198	2,931	8,039	3,315	7,803	3,249
DECEMBER	6,210	3,250	9,420	3,633	9,658	3,636
TOTAL		45,064		45,820		45,869

NOTE: Recorded Net Peak demands and NEL include off-system wholesale contracts.

DUKE ENERGY FLORIDA

SCHEDULE 4.3
PREVIOUS YEAR ACTUAL AND TWO-YEAR FORECAST OF PEAK DEMAND
AND NET ENERGY FOR LOAD BY MONTH
LOW CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	ACTUAL		FORECAST		FORECAST	
	2021		2022		2023	
MONTH	PEAK DEMAND MW	NEL GWh	PEAK DEMAND MW	NEL GWh	PEAK DEMAND MW	NEL GWh
JANUARY	**7,052**	3,268	**8,759**	2,964	**8,910**	2,954
FEBRUARY	8,308	2,857	8,117	2,644	8,287	2,608
MARCH	7,565	3,164	7,116	2,885	7,274	2,779
APRIL	7,871	3,245	7,104	3,001	6,796	2,879
MAY	8,735	4,034	8,192	3,523	7,909	3,547
JUNE	9,147	4,375	8,642	3,849	8,328	3,872
JULY	9,452	4,707	8,518	4,157	8,259	4,172
AUGUST	**9,681**	4,865	**8,658**	4,122	**8,390**	4,138
SEPTEMBER	8,770	4,309	8,435	3,881	8,175	3,894
OCTOBER	8,701	4,061	7,935	3,283	7,661	3,295
NOVEMBER	6,198	2,931	7,284	2,757	6,990	2,683
DECEMBER	6,210	3,250	7,810	2,830	7,970	2,820
TOTAL		45,064		39,894		39,642

NOTE: Recorded Net Peak demands and NEL include off-system wholesale contracts.

FUEL REQUIREMENTS AND ENERGY SOURCES

DEF's two-year actual and ten-year projected nuclear, coal, oil, and gas requirements (by fuel unit) are shown in Schedule 5. DEF's two-year actual and ten-year projected energy sources by fuel type are presented in Schedules 6.1 and 6.2, in GWh and percent (%) respectively. Although DEF's fuel mix continues to rely on an increasing amount of natural gas to meet its generation needs, DEF continues to maintain alternate fuel supplies including long term operation of some coal fired facilities, adequate supplies of oil for dual fuel back up and increasing amounts of renewable generation particularly from solar generation. Projections shown in Schedules 5 and 6 reflect the Base Load and Energy Forecasts.

DUKE ENERGY FLORIDA

SCHEDULE 5

FUEL REQUIREMENTS

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
				-ACTUAL-											
	FUEL REQUIREMENTS		UNITS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
(1)	NUCLEAR		TRILLION BTU	0	0	0	0	0	0	0	0	0	0	0	0
(2)	COAL		1,000 TON	1,562	2,390	2,294	1,358	1,107	880	820	721	923	754	860	766
(3)	RESIDUAL	TOTAL	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(4)		STEAM	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(5)		CC	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(6)		CT	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(7)		DIESEL	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(8)	DISTILLATE	TOTAL	1,000 BBL	118	191	21	7	12	12	12	16	15	18	20	19
(9)		STEAM	1,000 BBL	40	49	11	7	11	10	11	11	11	12	11	11
(10)		CC	1,000 BBL	3	0	0	0	0	0	0	0	0	0	0	0
(11)		CT	1,000 BBL	75	142	9	0	1	2	2	5	4	6	8	8
(12)		DIESEL	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(13)	NATURAL GAS	TOTAL	1,000 MCF	269,893	255,329	230,601	237,684	246,068	249,122	250,879	250,282	245,711	244,797	240,100	233,095
(14)		STEAM	1,000 MCF	25,624	23,250	14,695	13,970	20,750	18,990	20,497	16,863	17,780	16,175	16,430	15,458
(15)		CC	1,000 MCF	237,427	224,581	210,454	218,621	220,225	225,812	225,675	228,736	225,829	225,422	220,624	214,574
(16)		CT	1,000 MCF	6,841	7,498	5,452	5,092	5,093	4,320	4,707	4,683	2,101	3,201	3,047	3,064
	OTHER (SPECIFY)														
(17)	OTHER, DISTILLATE	ANNUAL FIRM INTERCHANGE	1,000 BBL	N/A	N/A	0	0	0	0	0	0	0	0	0	0
(18)	OTHER, NATURAL GAS	ANNUAL FIRM INTERCHANGE, CC	1,000 MCF	N/A	N/A	0	0	0	0	0	0	0	0	0	0
(18.1)	OTHER, NATURAL GAS	ANNUAL FIRM INTERCHANGE, CT	1,000 MCF	N/A	N/A	5,761	5,754	6,902	5,262	5,210	854	0	0	0	0
(19)	OTHER, COAL	ANNUAL FIRM INTERCHANGE, STEAM	1,000 TON	N/A	N/A	0	0	0	0	0	0	0	0	0	0

DUKE ENERGY FLORIDA

SCHEDULE 6.1
ENERGY SOURCES (GWh)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
				-ACTUAL-											
	ENERGY SOURCES		UNITS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
(1)	ANNUAL FIRM INTERCHANGE 1/		GWh	1,025	3,461	565	560	671	513	511	92	14	22	13	17
(2)	NUCLEAR		GWh	0	0	0	0	0	0	0	0	0	0	0	0
(3)	COAL		GWh	3,287	5,042	4,986	2,869	2,289	1,761	1,644	1,440	1,859	1,528	1,752	1,548
(4)	RESIDUAL	TOTAL	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(5)		STEAM	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(6)		CC	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(7)		CT	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(8)		DIESEL	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(9)	DISTILLATE	TOTAL	GWh	33	56	4	0	0	1	1	2	2	3	3	4
(10)		STEAM	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(11)		CC	GWh	2	0	0	0	0	0	0	0	0	0	0	0
(12)		CT	GWh	31	56	4	0	0	1	1	2	2	3	3	4
(13)		DIESEL	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(14)	NATURAL GAS	TOTAL	GWh	36,327	32,981	33,075	34,185	35,095	35,650	35,741	35,908	35,219	35,109	34,394	33,318
(15)		STEAM	GWh	2,244	570	1,316	1,236	1,903	1,729	1,856	1,505	1,589	1,441	1,450	1,354
(16)		CC	GWh	33,574	31,841	31,232	32,448	32,691	33,482	33,415	33,944	33,463	33,414	32,702	31,721
(17)		CT	GWh	510	570	527	501	501	438	470	460	168	254	242	243
(18)	OTHER 2/														
	QF PURCHASES		GWh	1,769	1,805	2,014	2,018	852	511	2	2	2	2	2	2
	RENEWABLES OTHER		GWh	0	0	0	0	0	0	0	0	0	0	0	0
	RENEWABLES MSW		GWh	654	609	883	918	970	605	605	605	608	605	605	605
	RENEWABLES BIOMASS		GWh	0	0	0	0	0	0	0	0	0	0	0	0
	RENEWABLES SOLAR		GWh	706	942	1,913	2,882	3,872	4,453	5,274	6,070	6,899	7,697	8,558	9,378
	IMPORT FROM OUT OF STATE		GWh	1,013	169	0	0	0	0	0	0	0	0	0	0
	EXPORT TO OUT OF STATE		GWh	0	0	0	0	0	0	0	0	0	0	0	0
(19)	NET ENERGY FOR LOAD		GWh	44,814	45,064	43,440	43,432	43,750	43,495	43,776	44,120	44,602	44,966	45,328	44,872

1/ NET ENERGY PURCHASED (+) OR SOLD (-) WITHIN THE FRCC REGION.
2/ NET ENERGY PURCHASED (+) OR SOLD (-).

DUKE ENERGY FLORIDA

SCHEDULE 6.2
ENERGY SOURCES (PERCENT)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
				-ACTUAL-											
	ENERGY SOURCES		UNITS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
(1)	ANNUAL FIRM INTERCHANGE 1/		%	2.3%	7.7%	1.3%	1.3%	1.5%	1.2%	1.2%	0.2%	0.0%	0.0%	0.0%	0.0%
(2)	NUCLEAR		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(3)	COAL		%	7.3%	11.2%	11.5%	6.6%	5.2%	4.0%	3.8%	3.3%	4.2%	3.4%	3.9%	3.5%
(4)	RESIDUAL	TOTAL	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(5)		STEAM	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(6)		CC	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(7)		CT	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(8)		DIESEL	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(9)	DISTILLATE	TOTAL	%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(10)		STEAM	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(11)		CC	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(12)		CT	%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(13)		DIESEL	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(14)	NATURAL GAS	TOTAL	%	81.1%	73.2%	76.1%	78.7%	80.2%	82.0%	81.6%	81.4%	79.0%	78.1%	75.9%	74.3%
(15)		STEAM	%	5.0%	1.3%	3.0%	2.8%	4.4%	4.0%	4.2%	3.4%	3.6%	3.2%	3.2%	3.0%
(16)		CC	%	74.9%	70.7%	71.9%	74.7%	74.7%	77.0%	76.3%	76.9%	75.0%	74.3%	72.1%	70.7%
(17)		CT	%	1.1%	1.3%	1.2%	1.2%	1.1%	1.0%	1.1%	1.0%	0.4%	0.6%	0.5%	0.5%
(18)	OTHER 2/														
	QF PURCHASES		%	3.9%	4.0%	4.6%	4.6%	1.9%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	RENEWABLES OTHER		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	RENEWABLES MSW		%	1.5%	1.4%	2.0%	2.1%	2.2%	1.4%	1.4%	1.4%	1.4%	1.3%	1.3%	1.3%
	RENEWABLES BIOMASS		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	RENEWABLES SOLAR		%	1.6%	2.1%	4.4%	6.6%	8.9%	10.2%	12.0%	13.8%	15.5%	17.1%	18.9%	20.9%
	IMPORT FROM OUT OF STATE		%	2.3%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	EXPORT TO OUT OF STATE		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(19)	NET ENERGY FOR LOAD		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

1/ NET ENERGY PURCHASED (+) OR SOLD (-) WITHIN THE FRCC REGION.
2/ NET ENERGY PURCHASED (+) OR SOLD (-).

FORECASTING METHODS AND PROCEDURES

INTRODUCTION

Accurate forecasts of long-range electric energy consumption, customer growth, and peak demand are essential elements in electric utility planning. Accurate projections of a utility's future load growth require a forecasting methodology with the ability to account for a variety of factors influencing electric consumption over the planning horizon. DEF's forecasting framework utilizes a set of econometric models as well as the Itron statistically adjusted end-use (SAE) approach to achieve this end. This section will describe the underlying methodology of the customer, energy, and peak demand forecasts including the principal assumptions incorporated within each. Also included is a description of how DSM impacts the forecast and a review of DEF's DSM programs.

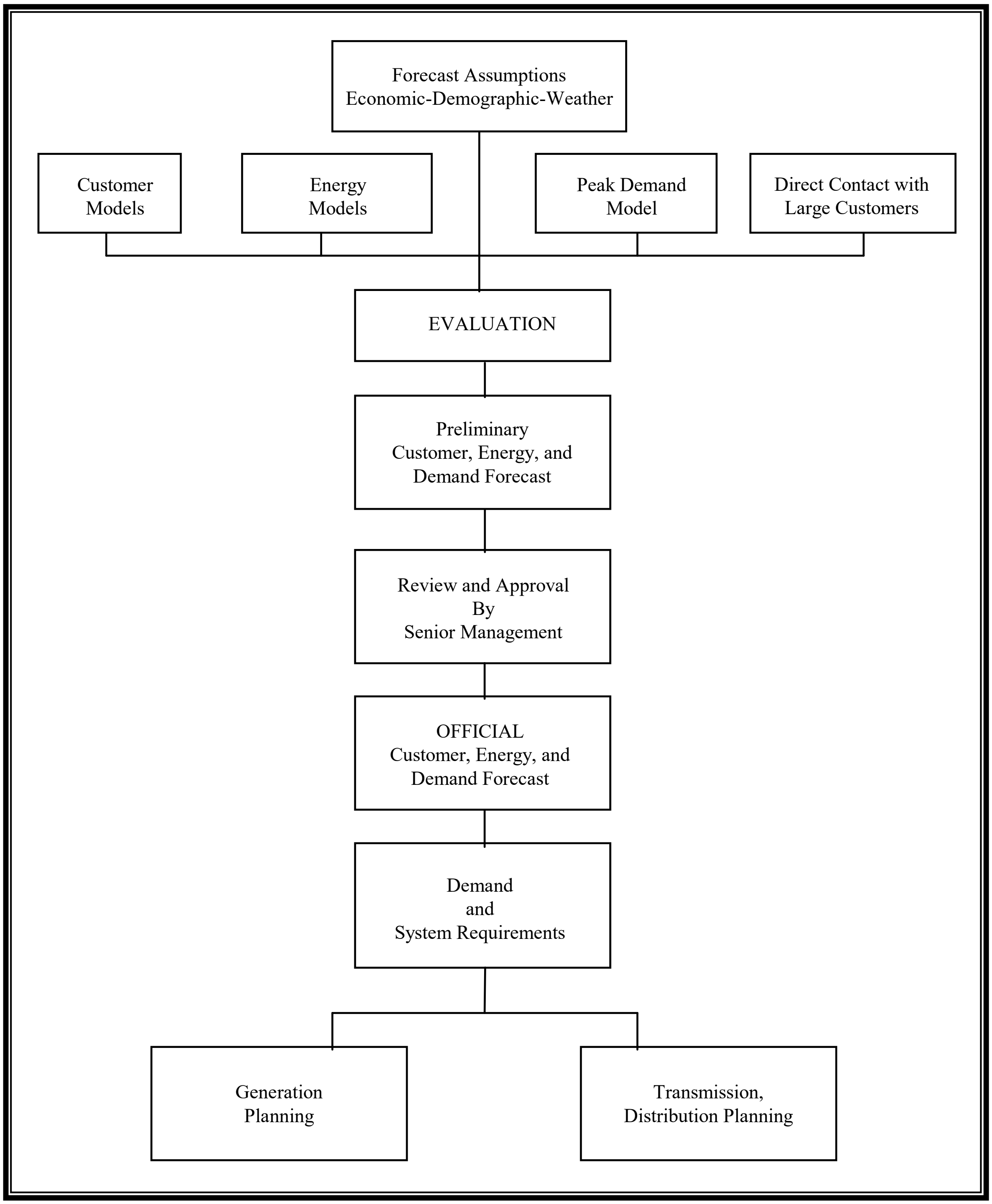
Figure 2.1, entitled "Customer, Energy and Demand Forecast," gives a general description of DEF's forecasting process. Highlighted in the diagram is a disaggregated modeling approach that blends the impacts of average class usage, as well as customer growth, based on a specific set of assumptions for each class. Also accounted for is some direct contact with large customers. These inputs provide the tools needed to frame the most likely scenario of the Company's future demand.

FORECAST ASSUMPTIONS

The first step in any forecasting effort is the development of assumptions upon which the forecast is based. A collaborative internal Company effort develops these assumptions including the research efforts of several external sources. These assumptions specify major factors that influence the level of customers, energy sales, or peak demand over the forecast horizon. The following set of assumptions forms the basis for the forecast presented in this document.

FIGURE 2.1

Customer, Energy, and Demand Forecast



GENERAL ASSUMPTIONS

1. Normal weather conditions for energy sales are assumed over the forecast horizon using a sales-weighted 30-year average of conditions at the St Petersburg, Orlando, and Tallahassee weather stations. For billed kilowatt-hour (kWh) sales projections, the normal weather calculation begins with a historical 30-year average of calendar and billing cycle weighted monthly heating and cooling degree-days (HDD and CDD). The expected consumption period read dates for each projected billing cycle determines the exact historical dates for developing the 30-year average weather condition each month. Each class displays different weather-sensitive base temperatures from which degree day (DD) values begin to accumulate. Seasonal and monthly peak demand projections are based on a 30-year historical average of system-weighted degree days using the "Itron Rank-Sort Normal" approach which takes annual weather extremes into account as well as the date and hour of occurrence.

2. DEF customer forecast is based upon historical population estimates and produced by the BEBR at the University of Florida (as published in "Florida Population Studies", Bulletin No. 186 April 2021) and provides the basis for the population forecast used in the development of the DEF customer forecast. The BEBR's historical estimations of county Household data are useful to the customer forecast as well. National and Florida economic projections produced by Moody's Analytics in their July 2021 forecast, along with Energy Information Administration (EIA) 2020 surveys of residential appliance saturation and average appliance efficiency levels provided the basis for development of the DEF energy forecast.

3. Within the DEF service area, the phosphate mining industry is the dominant sector in the industrial sales class. Three major customers accounted for 26.8% of the industrial class MWh sales in 2021, down a bit from 2020 due to a new large manufacturer starting up and taking its share of total Industrial sales. No change in Phosphate energy usage is projected in 2022 but a 7% increase is assumed to occur in 2023. These energy-intensive "crop nutrient" producers mine and process phosphate-based fertilizer products for the global marketplace. The supply and demand (price) for their products are dictated by global conditions that include, but are not limited to, foreign competition, national/international agricultural industry conditions, exchange-rate fluctuations, international trade pacts and U.S. environmental regulations. The market price of the raw mined

commodity often dictates production levels. Load and energy consumption at the DEF-served mining or chemical processing sites depend heavily on plant operations, which are heavily influenced by these global as well as the local conditions, including environmental regulations. Going forward, global currency fluctuations and global stockpiles of farm commodities will determine the demand for fertilizers. Any increase in self-service generation will act to reduce energy requirements from DEF. An upside risk to this projection lies in the price of energy, especially low natural gas price, which is a major cost in mining and producing phosphoric fertilizers. DEF has begun to assume a decline in Phosphate sector energy consumption late in the planning horizon as mining product becomes scare in the areas currently mined.

4. DEF has supplied capacity and energy service to wholesale customers on a “full” and “partial” requirement basis for many years. Many Sales for Resale Customers have moved to other suppliers for their needs or have begun to self-generate. What remains are Partial requirements (PR) contracted loads with the Reedy Creek Improvement District (RCID) and Seminole Electric Cooperative, Inc. (SECI). The forecast reflects the current contractual obligations based on the nature of the stratified load being requested, plus their ability to receive dispatched energy from power marketers any time it is more economical for them to do so. All contracts are projected to expire in the specific year designated in the respective contracts.

5. This forecast assumes that DEF will successfully renew all future franchise agreements.

6. This forecast incorporates demand and energy reductions expected to be realized through currently FPSC approved DSM goals as stated in Docket No. 20190018-EG.

7. This forecast reflects impacts from both Plug-in Hybrid Electric Vehicle (PHEV) and behind the meter customer-owned renewable generation which is mostly solar photovoltaic (PV) installations on energy and peak demand. PHEV customer penetration levels, which are expected to be a small share of the total DEF service area vehicle stock over the planning horizon, incorporates an EPRI Model view that includes gasoline price expectations. DEF customer PV penetration levels are expected to continue to grow over the planning horizon and the forecast incorporates a view on equipment and electric price impacts on customer use.

8. Expected energy and demand reductions from customer-owned self-service cogeneration facilities are also included in this forecast. DEF will supply the supplemental load of self-service cogeneration customers. While DEF offers "standby" service to all cogeneration customers, the forecast does not assume an unplanned need for power at time of peak.

   This forecast assumes that the regulatory environment and the obligation to serve our retail customers will continue throughout the forecast horizon. Regarding wholesale customers, the forecast does not plan for generation resources unless a long-term contract is in place.

9. DEF incorporates a price of carbon into its planning assumptions, beginning in 2025. This price is incorporated into the resource planning and dispatch modeling assumptions to act as a proxy for the effects of imposed carbon emissions restrictions that the company believes will be part of future regulation. Because these have the effect of raising the future price of electricity, there is a small reduction in the growth of future energy use.

ECONOMIC ASSUMPTIONS

The economic outlook for this forecast was developed in the summer of 2021 as vaccines were rolling out to stem the surge of the COVID-19 pandemic. The national economy had begun to bounce back from the restrictions that had been in place. A large portion of the 25 million jobs lost in the early months of the pandemic had returned. The great uncertainty at the time became what damage "variants" would bring next. The Federal Reserve Bank and Federal legislation had supplied very favorable policies to help the economy along its path back to normalcy. New policies are expected to unfold as the Biden Administration takes hold.

It is with this background that the DEF Customer, Energy and Peak Demand forecast was developed and the environment in which the Moody's Analytics July 2021 U.S. forecast and Florida forecast was applied. Major assumptions included return to "normalcy" beginning in mid-2021 and specific industries that operate with "close proximity" situations like theme parks, airline flights and movie theaters were reaching towards normal levels of operation. What continued to be a cause of concern was whether commercial real estate could experience a permanent impact where demand for office floorspace may no longer grow as rapidly.

A silver lining to the forecast in the short to medium term involves the Federal Reserve actions which resulted in declines in mortgage rates. This has resulted in a boost in home construction, home sales and home prices. Secondly, low interest rates helped boost stock equity prices, helping boost shareholder wealth. It should be noted that both the housing sector and shareholder benefits from current policies are not expected to last forever.

While the preparation for this forecast did not take place with the same level great uncertainty as last year, this projection deals with the uncertainty of continued fiscal policy stimulus from programs like the "Build-Back-Better" plan which will face a big political battle getting passed. Moody's assumptions assumed some stimulus would get passed but not all the Administration called for.

The recent past has provided a fairly long period of stable fuel prices, mainly due to adequate supply and the success of fracking technology and the lack of friction amongst Organization of the Petroleum Exporting Countries (OPEC) members. While energy prices have climbed recently, price inflation is expected to subside as supply chain issues are resolved. The DEF Load Forecast has assumed for a few years that a cost of carbon emissions may be imposed upon electric utilities through federal regulation beginning in the 2025 timeframe. Although the form of such regulation is unknown, it is modeled as a fee based on the level of carbon emissions projected from the operation of the generation fleet of the company. These costs are reflected in the resulting dispatch of the generating portfolio and are assumed to increase electric prices by biasing dispatch away from higher carbon emitting resources such as coal.

The Florida economy was hit particularly hard by the pandemic due to is large Entertainment & Hospitality sector. Tourism plummeted as did tourist tax collections. The State relies on tourism for a greater share of its revenues than most other States. This means State budgets could be reduced resulting in less investment in State & Local economies. Government stimulus was designed to help many small businesses although not all were expected to survive. The last twelve months can be classified as an economic "turnaround story". 92% of all the lost jobs have been refilled or replaced as of December 2021. The State's unemployment rate has dropped to 4.4% from 5.1% 12 months prior. Florida has rebounded much more quickly than most assumed. Continued guidance from Federal and State policymakers can continue to aid parts of the economy that remains in distress. Hope remains that the Omicron variant, which was generally less severe than the Delta variant, will fade quickly and not be followed by another mutation.

Throughout the ten-year forecast horizon, risks and uncertainties are always recognized and handled on a "highest probability of outcome" basis. General rules of economic theory, namely, supply and demand equilibrium are maintained in the long run. This notion is applied to energy/commodity prices, currency levels, the housing market, wage rates, birth rates, inflation and interest rates. Uncertainty surrounding specific weather anomalies (hurricanes or earthquakes), international crises, such as wars or terrorist acts, or future pandemic events, are not explicitly designed into this projection. Thus, any situations of this variety will result in a deviation from this forecast.

FORECAST METHODOLOGY

The DEF forecast of customers, energy sales, and peak demand applies both an econometric and end-use methodology. The residential and commercial energy projections incorporate Itron's SAE approach while other classes use customer-class specific econometric models. These models are expressly designed to capture class-specific variation over time. Peak demand models are projected on a disaggregated basis as well. This allows for appropriate handling of individual assumptions in the areas of wholesale contracts, demand response, interruptible service and changes in self-service generation capacity.

ENERGY AND CUSTOMER FORECAST

In the retail jurisdiction, customer class models have been specified showing a historical relationship to weather and economic/demographic indicators using monthly data for sales models and customer models. Sales are regressed against "driver" variables that best explain monthly fluctuations over the historical sample period. Forecasts of these input variables are either derived internally or come from a review of the latest projections made by several independent forecasting concerns. The external sources of data include Moody's Analytics and the University of Florida's BEBR. Internal company forecasts are used for projections of electricity price, weather conditions, the length of the billing month and rates of customer owned renewable and electric vehicle adoption. The incorporation of residential and commercial "end-use" energy has been modeled as well. Surveys of residential appliance saturation and average efficiency performed by the company's Market Research department and the EIA, along with trended projections of both by Itron capture a significant piece of the changing future environment for electric energy consumption. Specific sectors are modeled as follows:

Residential Sector

Residential kWh usage per customer is modeled using the SAE framework. This approach explicitly introduces trends in appliance saturation and efficiency, dwelling size and thermal efficiency. It allows for an easier explanation of usage levels and changes in weather-sensitivity over time. The "bundling" of 19 residential appliances into "heating", "cooling" and "other" end uses form the basis of equipment-oriented drivers that interact with typical exogenous factors such as real median household income, average household size, cooling degree-days, heating degree-days, the real price of electricity to the residential class and the average number of billing days in each sales month. This structure captures significant variation in residential usage caused by changing appliance efficiency and saturation levels, economic cycles, weather fluctuations, electric price, and sales month duration. Projections of kWh usage per customer combined with the customer forecast provide the forecast of total residential energy sales. The residential customer forecast is developed by correlating monthly residential customers with county level population projections for counties in which DEF serves residential customers are provided by the BEBR.

Commercial Sector

Commercial MWh energy sales are forecast based on commercial sector (non-agricultural, non-manufacturing and non-governmental) employment, the real price of electricity to the commercial class, the average number of billing days in each sales month and heating and cooling degree-days. As in the residential sector, these variables are interacted with the commercial end-use equipment (listed below) after trends in equipment efficiency and saturation rates have been projected.

- Heating
- Cooling
- Ventilation

- Water heating
- Cooking
- Refrigeration
- Outdoor Lighting
- Indoor Lighting
- Office Equipment (PCs)
- Miscellaneous

The SAE model contains indices that are based on end-use energy intensity projections developed from EIA's commercial end-use forecast database. Commercial energy intensity is measured in terms of end-use energy use per square foot. End-use energy intensity projections are based on end-use efficiency and saturation estimates that are in turn driven by assumptions in available technology and costs, energy prices, and economic conditions. Energy intensities are calculated from the EIA's Annual Energy Outlook (AEO) commercial database. End-use intensity projections are derived for eleven building types. The energy intensity (EI) is derived by dividing end-use electricity consumption projections by square footage:

$$EI_{bet} = Energy_{bet} / sqft_{bt}$$

Where:

$Energy_{bet}$ = energy consumption for building type b, end-use e, year t

$Sqft_{bt}$ = square footage for building type b in year t

Commercial customers are modeled using the projected level of residential customers.

Industrial Sector

Energy sales to this sector are separated into two sub-sectors. A large portion of industrial energy use is consumed by the phosphate mining industry. Because this one industry is such a large share of the total industrial class, it is separated and modeled apart from the rest of the class. The term "non-phosphate industrial" is used to refer to those customers who comprise the remaining portion of total industrial class sales. Both groups are impacted by changes in economic activity. However, adequately explaining sales levels requires separate explanatory variables. Non-phosphate industrial energy sales are modeled using Florida manufacturing employment interacted with the Florida industrial production index, and the average number of sales month billing days.

The industrial phosphate mining industry is modeled using customer-specific information with respect to anticipated market conditions. Since this sub-sector is comprised of only three customers, the forecast is dependent upon information received from direct customer contact. DEF Large Account Management employees provide specific phosphate customer information regarding customer production schedules, inventory levels, area mine-out and start-up predictions, and changes in self-service generation or energy supply situations over the forecast horizon. These Florida mining companies compete globally into a global market where farming conditions dictate the need for "crop nutrients". The projection of industrial accounts is not expected to decline as rapidly as it has for years. The pace of "off-shoring" manufacturing jobs is expected to decline from past levels. Both the Trump and Biden administrations have favored the rebuilding of the American manufacturing sector, with the Biden administration adding a focus on carbon reduction. Secondly, the rapid increase in Florida population should recalibrate Florida's competitiveness in "location analysis" studies performed by industry when determining site selection for new operations.

Street Lighting

Electricity sales to the street and highway lighting class have now declined for several years. A continued decline is expected as improvements in lighting efficiency are projected. The number of accounts, which has dropped by more than one-third since 1995 due to most transferring to public authority ownership, is expected to decline further before leveling off in the intermediate term. A simple time-trend was used to project energy consumption and customer growth in this class.

Public Authorities

Energy sales to public authorities (SPA), comprised of federal, state and local government operated services, is also projected to grow within the DEF's service area. The level of government services, and thus energy, can be tied to the population base, as well as the amount of tax revenue collected to pay for these services. Factors affecting population growth will affect the need for additional governmental services (i.e., public schools, city services, etc.) thereby increasing SPA energy consumption. Government employment has been determined to be the best indicator of the level of government services provided. This variable, along with cooling degree-days and the sales month billing days, explains most of the variation over the historical sample period. Adjustments are also included in this model to account for the large change in school-related energy use throughout the year. The SPA customer forecast is projected linearly as a function of a time-trend. Recent budget issues have also had an impact on the near-term pace of growth.

Sales for Resale Sector

The Sales for Resale sector encompasses all firm sales to other electric power entities. This includes sales to other utilities (municipal or investor-owned) as well as power agencies (rural electric authority or municipal).

SECI is a wholesale, or sales for resale, customer of DEF that contracts for both seasonal and stratified loads over the forecast horizon. The municipal sales for resale class includes a number of customers, divergent not only in scope of service (i.e., full or partial requirement), but also in composition of ultimate consumers. Each customer is modeled separately in order to accurately reflect its individual profile. DEF serves partial requirement service (PR) to load serving customers such as Reedy Creek Improvement District. In each case, these customers contract with DEF for a specific level and type of stratified capacity (MW) needed to provide their particular electrical system with an appropriate level of reliability. The energy forecast for each contract is derived using information provided by the purchaser who better understands their needs. Electric energy growth and competitive market prices will dictate the amount of wholesale demand and energy throughout the forecast horizon.

PEAK DEMAND FORECAST

The forecast of peak demand also employs a disaggregated econometric methodology. For seasonal (winter and summer) peak demands, as well as each month of the year, DEF’s coincident system peak is separated into five major components. These components consist of total retail load, interruptible and curtailable tariff non-firm load, conservation and demand response program capability, wholesale demand, and company use demand.

Total retail load refers to projections of DEF retail monthly net peak demand before any activation of DEF's General Load Reduction Plan. The historical values of this series are constructed to show the size of DEF's retail net peak demand assuming no utility activated load control had ever taken place. The value of constructing such a "clean" series enables the forecaster to observe and correlate the underlying trend in retail peak demand to retail customer levels and coincident weather conditions at the time of the peak and the amounts of Base-Heating-Cooling load estimated by the monthly Itron models without the impacts of year-to-year variation in utility-sponsored DR programs. Monthly peaks are projected using the Itron SAE generated use patterns for both weather sensitive (cooling & heating) appliances and base load appliances calculated by class in the energy models. Daily and hourly models of applying DEF class-of-business load research survey data lead to class and total retail hourly load profiles when a 30-year normal weather template replaces actual weather. The projections of retail peak are the result of a monthly model driven by the summation of class base, heating and cooling energy interpolated 30-year normal weather pattern-driven load profile. The projection for the months of January (winter) and August (summer) are typically when the seasonal peaks occur. Energy conservation and direct load control estimates consistent with DEF's DSM goals that have been established by the FPSC are applied to the MW forecast. Projections of dispatchable and cumulative non-dispatchable DSM impacts are subtracted from the projection of potential firm retail demand resulting in a projected series of firm retail monthly peak demand figures. The Interruptible and Curtailable service (IS and CS) tariff load projection is developed from historic monthly trends, as well as the incorporation of specific projected information obtained from DEF's large industrial accounts on these tariffs by account executives. Developing this piece of the demand forecast allows for appropriate firm retail demand results in the total retail coincident peak demand projection.

Sales for Resale demand projections represent load supplied by DEF to other electric suppliers such as SECI, RCID, and other electric transmission and distribution entities. For Partial Requirement demand projections, contracted MW levels dictate the level of seasonal demands.

DEF "company use" at the time of system peak is estimated using load research metering studies similar to potential firm retail. It is assumed to remain stable over the forecast horizon as it has historically.

Each of the peak demand components described above is a positive value except for the DSM program MW impacts and IS and CS load. These impacts represent a reduction in peak demand and are assigned a negative value. Total system firm peak demand is then calculated as the arithmetic sum of the five components.

HIGH AND LOW SCENARIOS

DEF has developed high and low scenarios around the base case energy sales and peak demand projections. Both scenarios incorporate historical variation in weather and economic conditions as well as service area population and household growth. Historical variation for economic driver variables selected in the base case energy sales models using the Moody's S1 & S3 (High/Low) scenarios. High and low weather variables were determined for the energy and peak weather variables (HDDs, CDDs, and monthly peak DDs) using actual 30-year weather conditions. Each weather variable used in the modeling process is ranked monthly from "high-to-low" degree days. The high (hottest or coldest) one-fourth of each variable is averaged and becomes a normal "High Case" weather condition. Similarly, the "mildest" one-fourth of each weather variable's 30 observations are averaged and become the normal "Low Case" weather condition. A review of twenty-year historical variation of DEF 29-county population growth based on BEBR high and low customer projections out ten years resulted in the final area of variability around the Load Forecast.

This procedure captures the most influential variables around energy sales and peak demand by estimating high and low cases for economics, demographics, and weather conditions. DEF has evaluated the load projections generated through this process against projected loads based on extreme temperature events over the last 40 years and concluded that the range of load represented in these cases encompasses the probable outcome of such extreme weather recurrence.

CONSERVATION

Pursuant to the provisions of Florida Statutes Section 366.82 (the "FEECA Statute"), which requires the FPSC to adopt goals for the FEECA utilities to increase energy efficiency and increase the development of demand-side renewable energy systems and directs the FPSC to review those goals every five years, in 2019, the FPSC conducted its statutorily required review and determined that it was in the public interest to continue with the goals for the 2020-2024 time period established in the 2014 Goals setting proceeding and directed the utilities to file Program Plans designed to achieve these goals (Order No. PSC-2019-00509-FOF). In August 2020, DEF submitted a Plan designed to achieve the 2020-2024 goals which was approved by the Commission (Order No. PSC-2020-0274-PAA-EG). The programs included in this Plan are subject to periodic monitoring and evaluation to ensure that all demand-side resources are acquired in a cost-effective manner and that the program savings are durable. Tables 2.1 and 2.2 reflect the annual Program achievements for the residential and commercial sector compared to the Commission established goals for the 2020-2024 time period.

RESIDENTIAL CONSERVATION PROGRAMS

TABLE 2.1

Residential DSM MW and GWH Savings

RESIDENTIAL									
	WINTER PEAK MW REDUCTION			SUMMER PEAK MW REDUCTION			GWH ENERGY REDUCTION		
YEAR	TOTAL ACHIEVED	COMMISSION APPROVED GOAL	% VARIANCE	TOTAL ACHIEVED	COMMISSION APPROVED GOAL	% VARIANCE	TOTAL ACHIEVED	COMMISSION APPROVED GOAL	% VARIANCE
2020	31	32	-5%	18	16	13%	35	9	277%
2021	16	28	-42%	10	14	-26%	25	6	311%
2022		25			12			4	
2023		22			11			2	
2024		21			11			1	

The following provides a list of DEF's Residential DSM programs as of December 31, 2021, along with a brief overview of each program:

Home Energy Check – This is DEF's home energy audit program as required by Rule 25-17.003(3)(b), F.A.C. DEF offers a variety of options to customers for home energy audits including walk-through audits, phone assisted audits, and web enabled on-line audits. At the completion of the audit, DEF also provides kits that contain energy saving measures that may be easily installed by the customer.

Residential Incentive Program – This program provides incentives on a variety of cost-effective measures designed to provide energy savings. DEF expects to provide incentives to customers for the installation of approximately 75,000 energy saving measures over the 2020-2024 time period. These measures primarily include heating and cooling, duct repair, insulation, and energy efficient windows. The measures and incentive levels included in this program have been updated to reflect the impacts of new codes and standards.

Neighborhood Energy Saver – This program is designed to provide energy saving education and assistance to low income customers. This program targets neighborhoods that meet certain income eligibility requirements. DEF plans to install energy saving measures in approximately 5,250 homes annually over the 2020 to 2024 time period. These measures will be installed at no cost to the customer and include air infiltration measures, water heating measures, lighting, insulation, duct repair, and heat pump and air conditioning tune-ups. This program was resumed in 2021, after being suspended in 2020 due to COVID-19 concerns.

Low Income Weatherization Assistance Program – DEF partners with local agencies to provide funding for energy efficiency and weatherization measures to low income customers through this program. DEF expects to provide assistance to approximately 500 customers annually through this program.

EnergyWise – This is a voluntary residential demand response program that provides monthly bill credits to customers who allow DEF to reduce peak demand by controlling service to selected electric equipment through various devices and communication options installed on the customer's premises. These interruptions are at DEF's option, during specified time periods, and coincident with hours of peak demand. Customers must have a minimum average monthly usage of 600 kWh to be eligible to participate in this program.

COMMERCIAL/INDUSTRIAL CONSERVATION PROGRAMS

TABLE 2.2

Commercial/Industrial DSM MW and GWH Savings

COMMERCIAL / INDUSTRIAL									
	WINTER PEAK MW REDUCTION			SUMMER PEAK MW REDUCTION			GWH ENERGY REDUCTION		
YEAR	TOTAL ACHIEVED	COMMISSION APPROVED GOAL	% VARIANCE	TOTAL ACHIEVED	COMMISSION APPROVED GOAL	% VARIANCE	TOTAL ACHIEVED	COMMISSION APPROVED GOAL	% VARIANCE
2020	24	5	354%	46	8	460%	40	6	582%
2021	11	5	124%	24	7	248%	22	4	454%
2022		5			6			2	
2023		5			6			1	
2024		5			5			1	

The following provides a list of DEF’s Commercial DSM programs as of December 31, 2021, along with a brief overview of each program:

Business Energy Check – This is a commercial energy audit program that provides commercial customers with an analysis of their energy usage and information about energy-saving practices and cost-effective measures that they can implement at their facilities.

Better Business – This program provides incentives to commercial customers on a variety of cost-effective energy efficiency measures. These measures are primarily comprised of measures that reduce cooling and heating load.

Florida Custom Incentive – The objective of this program is to encourage customers to make capital investments for the installation of energy efficiency measures which reduce energy and peak demand. This program provides incentives for customized energy efficiency projects and measures that are cost effective but are not otherwise included in DEF’s prescriptive commercial programs.

Interruptible Service – This program is available to non-residential customers with a minimum billing demand of 500 KW or more who are willing to have their power interrupted. DEF has remote control access to the switch providing power to the customer’s equipment. Customers participating in the Interruptible Service program receive a monthly interruptible demand credit based on their bills.

Curtailable Service - This program is an indirect load control program that reduces DEF's energy demand at times of capacity shortage during peak or emergency conditions.

Standby Generation - This program is a demand control program that reduces DEF's demand based upon the control of the customer's back-up generator. The program is a voluntary program available to all commercial and industrial customers who have on-site stand-by generation capacity of at least 50 KW and are willing to reduce their DEF demand when deemed necessary.

OTHER DSM PROGRAMS

The following provides an overview of other DSM programs:

Technology Development – This program is used to fund research and development of new energy efficiency and demand response technologies. This program provides the opportunity to investigate and test new technologies and determine their usefulness and feasibility in the support energy efficiency and demand response programs.

Qualifying Facilities – This program analyzes, forecasts, facilitates, and administers the potential and actual power purchases from Qualifying Facilities (QFs) and the state jurisdictional QF or distributed generator interconnections. The program supports meetings with interested parties or potential QFs, including cogeneration and small power production facilities including renewables interested in providing renewable capacity or energy deliveries within our service territory. Project, interconnection, and avoided cost discussions with renewable and combined heat and power developers who are also exploring distributed generation options continue to remain steady. Most of the interest is coming from companies utilizing solar photovoltaic technology as the price of photovoltaic panels has decreased over time. The cost of this technology continues to decrease, and subsidies remain in place. As of December 31st, 2021, DEF had 60 active solar projects totaling over 4,400 MW in its FERC jurisdictional interconnection queue and 13 of those projects included DEF as the project developer. As the technologies advance and the market evolves, the Company's policies will continue to be refined and remain compliant.

CHAPTER 3

FORECAST OF FACILITIES REQUIREMENTS

DUKE ENERGY.
FLORIDA

CHAPTER 3

FORECAST OF FACILITIES REQUIREMENTS

RESOURCE PLANNING FORECAST

OVERVIEW OF CURRENT FORECAST

Supply-Side Resources

As of December 31, 2021, DEF had a summer total firm capacity resource of 11,495 MW (see Table 3.1). This capacity resource includes fossil steam generators (2,423 MW), combined cycle plants (5,221 MW), combustion turbines (1,983 MW), solar power plants (321 MW), independent power purchases (1,135 MW), and non-utility purchased power (412 MW). Table 3.2 presents DEF's firm capacity contracts with renewable and cogeneration Facilities.

Demand-Side Programs

In August 2020, the FPSC approved demand-side management programs designed to meet the demand side management goals established by the Commission in Order PSC-2019-00509-FOF. Total DSM resources are presented in Schedules 3.1 and 3.2 of Chapter 2. These programs include Non-Dispatchable DSM, Interruptible Load, and Dispatchable Load Control resources.

Capacity and Demand Forecast

DEF's forecasts of capacity and demand for the projected summer and winter peaks can been found in Schedules 7.1 and 7.2, respectively. Demand forecasts shown in these schedules are based on Schedules 3.1.1 and 3.2.1, the base summer and winter forecasts. DEF's forecasts of capacity and demand are based on serving expected growth in retail requirements in its regulated service area and meeting commitments to wholesale power customers who have entered into supply contracts with DEF. In its planning process, DEF balances its supply plan for the needs of retail and wholesale customers and endeavors to ensure that cost-effective resources are available to meet the needs across the customer base.

Base Expansion Plan

DEF's planned supply resource additions and changes are shown in Schedule 8 and are referred to as DEF's Base Expansion Plan. This plan includes a net addition of over 3,100 MW of solar PV generation with an expected equivalent summer firm capacity contribution of approximately 960 MW, 110 MW of firm storage and 214 MW of new natural gas fired generation consisting of one planned combustion turbine unit added in year 2029, at undesignated sites as well as the incorporation of the full firm capacity of the Osprey Energy Center. DEF continues to seek market supply-side resource alternatives to enhance DEF's resource plan.

DEF recognizes that as solar penetration increases, including both DEF and customer owned PV, the relationship between the solar production and the coincident load peak will change. In this plan, DEF has assigned this DEF owned solar PV generation an equivalent summer capacity value equal to 57% of the nameplate capacity of the planned installations from 2021 to 2024. DEF modeling derives an equivalent summer non-coincident, but on-peak-hour capacity value equal to 25% of the facility's nameplate rating for planned PV installations from 2025 to 2028 and 12.5% for 2029 and beyond. An annual performance degradation factor of 0.5% has been assigned to the PV installations. DEF will continue to evaluate these assignments over time and may revise these values in future Site Plans based on changes in project designs and the data received from actual operation of these facilities once they are installed. In addition, DEF recognizes that higher penetration of PV resources on the system will result in a need for additional balancing of generation intermittency. The declining capacity value for PV installations late in this decade and beyond could be improved substantially if battery technology advances support economic pairing of PV with energy storage, which could also help to address the need for balancing generation intermittency. DEF's strategy of steady and carefully paced additions of PV to the system will allow continued evaluation of these impacts and the need for additional resources in the future to meet these needs.

On June 19, 2019, the Environmental Protection Agency (EPA) issued the Affordable Clean Energy (ACE) Rule to replace the 2015 Clean Power Plan. However, on January 19, 2021, the U.S. Court of Appeals for the District of Columbia issued its opinion vacating the ACE Rule and remanding the rule to the EPA. On October 29, 2021 the Supreme Court agreed to hear the appeal of the ACE vacatur. The case is set to be heard at the Supreme Court on February 28, 2022. In the meantime, the EPA is working on a replacement rule. DEF continues to monitor developments around the future of this rule.

Although there continues to be significant uncertainty about the specific form of regulation, DEF continues to expect that more stringent CO_2 emissions limitations in one form or another will be part of the regulatory future and has incorporated a moderate CO_2 emission price forecast as a placeholder for the impacts of such regulation. Duke Energy has set a goal at the enterprise level of achieving at least a 50% reduction in CO_2 emissions from a 2005 baseline by 2030 and net-zero emissions by 2050. The carbon price incents changes to the resource and dispatch plans which directionally support achievement of Duke Energy enterprise level target. Under the Biden administration, DEF expects an increasing likelihood of new power sector regulation or new federal legislation to reduce CO_2 emissions over the next few years. DEF and the Duke Energy enterprise continue to closely monitor these developments and will participate in the development of constructive public policy to support key ratepayer and stakeholder considerations such as community impacts, affordability, reliability and resilience.

DEF continues to modernize its generation resources with the retirement and projected retirements of several of the older units in the fleet, particularly combustion turbines at Bayboro, DeBary P2 - P6, Bartow P1 & P3, and University of Florida. Continued operations of the peaking units at Bayboro are planned through the year 2025. The DeBary units P2 - P6, Bartow units P1 & P3, and University of Florida cogeneration unit are projected to retire in 2027. There are many factors which may impact these retirements including environmental regulations and permitting, unit age and maintenance requirements, local operational needs, their relatively small capacity size and system requirement needs. In addition to retirements, DEF anticipates the expiration of several contracts with Qualifying Facilities and Independent Power Producers over the plan period. Although the Base Expansion Plan projects expiration of all these contracts, DEF continues to consider options for renewing these contracts in a manner that provides system reliability and cost-effective capacity and energy for our customers.

DEF's Base Expansion Plan projects the need for additional capacity with proposed in-service dates during the ten-year period from 2022 through 2031. The planned capacity additions, together with purchases from Qualifying Facilities (QF), Investor Owned Utilities, and Independent Power Producers help the DEF system meet the energy requirements of its customer base. The capacity needs identified in this plan may be impacted by DEF's ability to extend or replace existing purchase power, cogeneration and QF contracts and to secure new renewable purchased power resources in their respective projected timeframes. The additions in the Base Expansion Plan depend, in part, on projected load growth, and obtaining all necessary state and federal permits under current schedules. Changes in these or other factors could impact DEF's Base Expansion Plan.

DEF has examined the high and low load scenarios presented in Schedules 3.1 and 3.2. As discussed in Chapter 2, these scenarios were developed to present and test a range of likely outcomes in peak load and energy demand. DEF found that the Base Expansion Plan was robust under the range of conditions examined. Current planned capacity is sufficient to meet the demand including reserve margin in these cases through 2028 allowing DEF sufficient time to plan additional generation capacity either through power purchase or new generation construction as needed if higher than baseline conditions emerge. If lower than baseline conditions emerge, DEF can defer future generation additions.

Status reports and specifications for the planned new generation facilities are included in Schedule 9. The planned transmission lines associated with DEF Bulk Electric System (BES) are shown in Schedule 10.

TABLE 3.1

DUKE ENERGY FLORIDA

TOTAL CAPACITY RESOURCES OF
POWER PLANTS AND PURCHASED POWER CONTRACTS

AS OF DECEMBER 31, 2021

PLANTS	SUMMER NET DEPENDABLE CAPABILITY (MW)
Fossil Steam	2,423
Combined Cycle	5,221
Combustion Turbine	1,983
Solar	321
Total Net Dependable Generating Capability	**9,948**
Dependable Purchased Power	1,547
Firm Qualifying Facility Contracts (412 MW)	
Investor Owned Utilities (0 MW)	
Independent Power Producers (1,135 MW)	
TOTAL DEPENDABLE CAPACITY RESOURCES	**11,495**

TABLE 3.2

DUKE ENERGY FLORIDA
FIRM RENEWABLES
AND COGENERATION CONTRACTS

AS OF DECEMBER 31, 2021

Facility Name	Firm Capacity (MW)
Mulberry	115
Orange Cogen (CFR-Biogen)	104
Orlando Cogen	115
Pasco County Resource Recovery	23
Pinellas County Resource Recovery 1	40
Pinellas County Resource Recovery 2	14.8
TOTAL	**411.8**

DUKE ENERGY FLORIDA

SCHEDULE 7.1

FORECAST OF CAPACITY, DEMAND AND SCHEDULED MAINTENANCE

AT TIME OF SUMMER PEAK

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	TOTAL INSTALLED CAPACITY	FIRM[a] CAPACITY IMPORT	FIRM CAPACITY EXPORT	QF[b]	TOTAL CAPACITY AVAILABLE	SYSTEM FIRM SUMMER PEAK DEMAND	RESERVE MARGIN BEFORE MAINTENANCE		SCHEDULED MAINTENANCE	RESERVE MARGIN AFTER MAINTENANCE	
YEAR	MW	MW	MW	MW	MW	MW	MW	% OF PEAK	MW	MW	% OF PEAK
2022	10,118	1,469	0	78	11,665	8,821	2,844	32%	0	2,844	32%
2023	10,287	1,469	0	78	11,833	8,583	3,250	38%	0	3,250	38%
2024	10,492	873	0	78	11,442	8,648	2,794	32%	0	2,794	32%
2025	10,900	758	0	0	11,658	8,475	3,183	38%	0	3,183	38%
2026	10,799	654	0	0	11,453	8,523	2,930	34%	0	2,930	34%
2027	10,560	0	0	0	10,560	8,582	1,978	23%	0	1,978	23%
2028	10,586	0	0	0	10,586	8,667	1,919	22%	0	1,919	22%
2029	10,831	0	0	0	10,831	8,733	2,098	24%	0	2,098	24%
2030	10,863	0	0	0	10,863	8,798	2,065	23%	0	2,065	23%
2031	10,894	0	0	0	10,894	8,861	2,033	23%	0	2,033	23%

Notes:

a. FIRM Capacity Import includes Cogeneration, Utility and Independent Power Producers, and Short Term Purchase Contracts.

b. QF includes Firm Renewables

DUKE ENERGY FLORIDA

SCHEDULE 7.2

FORECAST OF CAPACITY, DEMAND AND SCHEDULED MAINTENANCE
AT TIME OF WINTER PEAK

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	TOTAL INSTALLED CAPACITY	FIRM[a] CAPACITY IMPORT	FIRM CAPACITY EXPORT	QF[b]	TOTAL CAPACITY AVAILABLE	SYSTEM FIRM WINTER PEAK DEMAND	RESERVE MARGIN BEFORE MAINTENANCE		SCHEDULED MAINTENANCE	RESERVE MARGIN AFTER MAINTENANCE	
YEAR	MW	MW	MW	MW	MW	MW	MW	% OF PEAK	MW	MW	% OF PEAK
2021/22	10,759	1,555	0	78	12,392	8,747	3,644	42%	0	3,644	42%
2022/23	10,759	1,555	0	78	12,392	8,993	3,399	38%	0	3,399	38%
2023/24	10,759	1,440	0	78	12,277	9,061	3,216	35%	0	3,216	35%
2024/25	11,114	802	0	0	11,916	8,882	3,034	34%	0	3,034	34%
2025/26	10,888	698	0	0	11,586	8,929	2,657	30%	0	2,657	30%
2026/27	10,888	698	0	0	11,586	8,988	2,598	29%	0	2,598	29%
2027/28	10,445	0	0	0	10,445	8,472	1,973	23%	0	1,973	23%
2028/29	10,445	0	0	0	10,445	8,529	1,916	22%	0	1,916	22%
2029/30	10,697	0	0	0	10,697	8,582	2,115	25%	0	2,115	25%
2030/31	10,716	0	0	0	10,716	8,628	2,088	24%	0	2,088	24%

Notes:

a. FIRM Capacity Import includes Cogeneration, Utility and Independent Power Producers, and Short Term Purchase Contracts.

b. QF includes Firm Renewables

DUKE ENERGY FLORIDA

SCHEDULE 8

PLANNED AND PROSPECTIVE GENERATING FACILITY ADDITIONS AND CHANGES

AS OF JANUARY 1, 2022 THROUGH DECEMBER 31, 2031

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
												FIRM			
								CONST.	COM'L IN-	EXPECTED	GEN. MAX.	NET CAPABILITY			
	UNIT	LOCATION	UNIT	FUEL		FUEL TRANSPORT		START	SERVICE	RETIREMENT	NAMEPLATE	SUMMER	WINTER		
PLANT NAME	NO.	(COUNTY)	TYPE	PRI.	ALT.	PRI.	ALT.	MO. / YR	MO. / YR	MO. / YR	KW	MW	MW	STATUS[a]	NOTES[b]
BAY TRAIL	1	CITRUS	PV	SO				03/2021	04/2022		74,900	43	0	P	(1)
SANDY CREEK	1	BAY	PV	SO				06/2021	04/2022		74,900	43	0	P	(1)
FORT GREEN	1	HARDEE	PV	SO				07/2021	05/2022		74,900	43	0	P	(1)
CHARLIE CREEK	1	HARDEE	PV	SO				05/2021	08/2022		74,900	43	0	P	(1)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(1)			(2)
BAY RANCH	1	BAY	PV	SO				05/2022	01/2023		74,900	43	0	P	(1)
HILDRETH	1	SUWANNEE	PV	SO				05/2022	01/2023		74,900	43	0	P	(1)
HARDEETOWN	1	LEVY	PV	SO				05/2022	01/2023		74,900	43	0	P	(1)
HIGH SPRINGS	1	ALACHUA	PV	SO				06/2022	02/2023		74,900	43	0	P	(1)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(2)			(2)
CLEAN ENERGY CONNECTION		UNKNOWN	PV	SO				05/2023	01/2024		299,600	171	0	P	(1) and (4)
OSPREY CC	1	POLK	CC	NG	DFO	PL	TK		11/2024			337	355	P	(3)
UNKNOWN		UNKNOWN	PV	SO				11/2023	07/2024		149,800	37	0	P	(1) and (4)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(3)			(2)
UNKNOWN		UNKNOWN	PV	SO				11/2024	07/2025		299,600	75	0	P	(1) and (4)
BAYBORO	P1 - P4	PINELLAS	CT	DFO		WA				12/2025		(171)	(238)		
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(4)			(2)
UNKNOWN		UNKNOWN	PV	SO				11/2025	07/2026		299,600	75	0	P	(1) and (4)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(5)			(2)
DEBARY	P2 - P6	VOLUSIA	CT	DFO		TK				06/2027		(247)	(324)		
BARTOW	P1, P3	PINELLAS	CT	DFO		WA				06/2027		(82)	(105)		
UNKNOWN		UNKNOWN	PV	SO				11/2026	07/2027		299,600	75	0	P	(1) and (4)
UNIVERSITY OF FLORIDA	P1	ALACHUA	GT	NG		PL				11/2027		(43)	(50)		
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(5)			(2)
UNKNOWN		UNKNOWN	PV	SO				11/2027	07/2028		299,600	75	0	P	(1) and (4)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(5)			(2)
UNKNOWN	P1	UNKNOWN	CT	NG	DFO	PL	TK	07/2026	06/2029		227,500	214	233	P	(1)
UNKNOWN		UNKNOWN	PV	SO				11/2028	07/2029		149,800	19	0	P	(1) and (4)
UNKNOWN		UNKNOWN	SPS	SO				11/2028	07/2029		149,800	19	19	P	(1) and (4)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(6)			(2)
UNKNOWN		UNKNOWN	PV	SO				11/2029	07/2030		149,800	19	0	P	(1) and (4)
UNKNOWN		UNKNOWN	SPS	SO				11/2029	07/2030		149,800	19	19	P	(1) and (4)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(6)			(2)
UNKNOWN		UNKNOWN	PV	SO				11/2030	07/2031		149,800	19	0	P	(1) and (4)
UNKNOWN		UNKNOWN	SPS	SO				11/2030	07/2031		149,800	19	19	P	(1) and (4)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(6)			(2)

a. See page v. for Code Identification of Future Generating Unit Status.

b. NOTES

(1) Planned, Prospective, or Committed project.

(2) Solar capacity degrades by 0.5% every year

(3) Osprey CC Acquisition total capacity is available once Transmission Upgrades are in service, total Summer capacity goes up to 583MW and total Winter capacity goes up to

(4) Multiple 74.9 MWs units at different sites. For SPS, 18.7 MW of storage for 74.9 MW of Solar PV.

DUKE ENERGY FLORIDA

SCHEDULE 9
STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2022

(1)	Plant Name and Unit Number:	**Bay Trail**	
(2)	Capacity		
	a. Nameplate (MWac):	74.9	
	b. Summer Firm (MWac):	42.7	
	c. Winter Firm (MWac):	-	
(3)	Technology Type:	PHOTOVOLTAIC	
(4)	Anticipated Construction Timing		
	a. Field construction start date:	3/2021	
	b. Commercial in-service date:	4/2022	(EXPECTED)
(5)	Fuel		
	a. Primary fuel:	SOLAR	
	b. Alternate fuel:	N/A	
(6)	Air Pollution Control Strategy:	N/A	
(7)	Cooling Method:	N/A	
(8)	Total Site Area:	~500-600 ACRES	
(9)	Construction Status:	PLANNED	
(10)	Certification Status:		
(11)	Status with Federal Agencies:		
(12)	Projected Unit Performance Data		
	a. Planned Outage Factor (POF):	N/A %	
	b. Forced Outage Factor (FOF):	N/A %	
	c. Equivalent Availability Factor (EAF):	N/A %	
	d. Resulting Capacity Factor (%):	~28 %	
	e. Average Net Operating Heat Rate (ANOHR):	N/A BTU/Kwh	
(13)	Projected Unit Financial Data		
	a. Book Life (Years):	30	
	b. Total Installed Cost (In-service year $/Kw):	1,371.67	
	c. Direct Construction Cost ($/Kw ac): ($2022)		
	d. AFUDC Amount ($/Kw):		
	e. Escalation ($/Kw):		
	f. Fixed O&M ($/Kw dc-yr): ($2022)	9.39	
	g. Variable O&M ($/MWh): ($2022)	0.00	
	h. K Factor:	NO CALCULATION	

DUKE ENERGY FLORIDA

SCHEDULE 9
STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2022

(1)	Plant Name and Unit Number:		**Sandy Creek**	
(2)	Capacity			
	a. Nameplate (MWac):		74.9	
	b. Summer Firm (MWac):		42.7	
	c. Winter Firm (MWac):		-	
(3)	Technology Type:		PHOTOVOLTAIC	
(4)	Anticipated Construction Timing			
	a. Field construction start date:		6/2021	
	b. Commercial in-service date:		4/2022	(EXPECTED)
(5)	Fuel			
	a. Primary fuel:		SOLAR	
	b. Alternate fuel:		N/A	
(6)	Air Pollution Control Strategy:		N/A	
(7)	Cooling Method:		N/A	
(8)	Total Site Area:		~550-650 ACRES	
(9)	Construction Status:		PLANNED	
(10)	Certification Status:			
(11)	Status with Federal Agencies:			
(12)	Projected Unit Performance Data			
	a. Planned Outage Factor (POF):			N/A %
	b. Forced Outage Factor (FOF):			N/A %
	c. Equivalent Availability Factor (EAF):			N/A %
	d. Resulting Capacity Factor (%):			~28 %
	e. Average Net Operating Heat Rate (ANOHR):			N/A BTU/Kwh
(13)	Projected Unit Financial Data			
	a. Book Life (Years):			30
	b. Total Installed Cost (In-service year $/Kw):			1,323.42
	c. Direct Construction Cost ($/Kw ac):	($2022)		
	d. AFUDC Amount ($/Kw):			
	e. Escalation ($/Kw):			
	f. Fixed O&M ($/Kw dc-yr):	($2022)		9.39
	g. Variable O&M ($/MWh):	($2022)		0.00
	h. K Factor:		NO CALCULATION	

DUKE ENERGY FLORIDA

SCHEDULE 9
STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2022

(1)	Plant Name and Unit Number:		**Fort Green**	
(2)	Capacity			
	a. Nameplate (MWac):		74.9	
	b. Summer Firm (MWac):		42.7	
	c. Winter Firm (MWac):		-	
(3)	Technology Type:		PHOTOVOLTAIC	
(4)	Anticipated Construction Timing			
	a. Field construction start date:		7/2021	
	b. Commercial in-service date:		5/2022	(EXPECTED)
(5)	Fuel			
	a. Primary fuel:		SOLAR	
	b. Alternate fuel:		N/A	
(6)	Air Pollution Control Strategy:		N/A	
(7)	Cooling Method:		N/A	
(8)	Total Site Area:		~500-600 ACRES	
(9)	Construction Status:		PLANNED	
(10)	Certification Status:			
(11)	Status with Federal Agencies:			
(12)	Projected Unit Performance Data			
	a. Planned Outage Factor (POF):		N/A	%
	b. Forced Outage Factor (FOF):		N/A	%
	c. Equivalent Availability Factor (EAF):		N/A	%
	d. Resulting Capacity Factor (%):		~28	%
	e. Average Net Operating Heat Rate (ANOHR):		N/A	BTU/Kwh
(13)	Projected Unit Financial Data			
	a. Book Life (Years):		30	
	b. Total Installed Cost (In-service year $/Kw):		1,371.67	
	c. Direct Construction Cost ($/Kw ac):	($2022)		
	d. AFUDC Amount ($/Kw):			
	e. Escalation ($/Kw):			
	f. Fixed O&M ($/Kw dc-yr):	($2022)	9.39	
	g. Variable O&M ($/MWh):	($2022)	0.00	
	h. K Factor:		NO CALCULATION	

DUKE ENERGY FLORIDA

SCHEDULE 9
STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2022

(1)	Plant Name and Unit Number:		**Charlie Creek**	
(2)	Capacity			
	a. Nameplate (MWac):		74.9	
	b. Summer Firm (MWac):		42.7	
	c. Winter Firm (MWac):		-	
(3)	Technology Type:		PHOTOVOLTAIC	
(4)	Anticipated Construction Timing			
	a. Field construction start date:		5/2021	
	b. Commercial in-service date:		8/2022	(EXPECTED)
(5)	Fuel			
	a. Primary fuel:		SOLAR	
	b. Alternate fuel:		N/A	
(6)	Air Pollution Control Strategy:		N/A	
(7)	Cooling Method:		N/A	
(8)	Total Site Area:		~550-650 ACRES	
(9)	Construction Status:		PLANNED	
(10)	Certification Status:			
(11)	Status with Federal Agencies:			
(12)	Projected Unit Performance Data			
	a. Planned Outage Factor (POF):		N/A %	
	b. Forced Outage Factor (FOF):		N/A %	
	c. Equivalent Availability Factor (EAF):		N/A %	
	d. Resulting Capacity Factor (%):		~29 %	
	e. Average Net Operating Heat Rate (ANOHR):		N/A BTU/Kwh	
(13)	Projected Unit Financial Data			
	a. Book Life (Years):		30	
	b. Total Installed Cost (In-service year $/Kw):		1,307.76	
	c. Direct Construction Cost ($/Kw ac):	($2022)		
	d. AFUDC Amount ($/Kw):			
	e. Escalation ($/Kw):			
	f. Fixed O&M ($/Kw dc-yr):	($2022)	9.39	
	g. Variable O&M ($/MWh):	($2022)	0.00	
	h. K Factor:		NO CALCULATION	

DUKE ENERGY FLORIDA

SCHEDULE 9
STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2022

(1)	Plant Name and Unit Number:		**Bay Ranch**	
(2)	Capacity			
	a. Nameplate (MWac):		74.9	
	b. Summer Firm (MWac):		42.7	
	c. Winter Firm (MWac):		-	
(3)	Technology Type:		PHOTOVOLTAIC	
(4)	Anticipated Construction Timing			
	a. Field construction start date:		5/2022	
	b. Commercial in-service date:		1/2023	(EXPECTED)
(5)	Fuel			
	a. Primary fuel:		SOLAR	
	b. Alternate fuel:		N/A	
(6)	Air Pollution Control Strategy:		N/A	
(7)	Cooling Method:		N/A	
(8)	Total Site Area:		~500-600 ACRES	
(9)	Construction Status:		PLANNED	
(10)	Certification Status:			
(11)	Status with Federal Agencies:			
(12)	Projected Unit Performance Data			
	a. Planned Outage Factor (POF):		N/A	%
	b. Forced Outage Factor (FOF):		N/A	%
	c. Equivalent Availability Factor (EAF):		N/A	%
	d. Resulting Capacity Factor (%):		~28	%
	e. Average Net Operating Heat Rate (ANOHR):		N/A	BTU/Kwh
(13)	Projected Unit Financial Data			
	a. Book Life (Years):		30	
	b. Total Installed Cost (In-service year $/Kw):		1,272.64	
	c. Direct Construction Cost ($/Kw ac):	($2022)		
	d. AFUDC Amount ($/Kw):			
	e. Escalation ($/Kw):			
	f. Fixed O&M ($/Kw dc-yr):	($2022)	9.39	
	g. Variable O&M ($/MWh):	($2022)	0.00	
	h. K Factor:		NO CALCULATION	

DUKE ENERGY FLORIDA

SCHEDULE 9
STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2022

(1)	Plant Name and Unit Number:		**Hildreth**	
(2)	Capacity			
	a. Nameplate (MWac):		74.9	
	b. Summer Firm (MWac):		42.7	
	c. Winter Firm (MWac):		-	
(3)	Technology Type:		PHOTOVOLTAIC	
(4)	Anticipated Construction Timing			
	a. Field construction start date:		5/2022	
	b. Commercial in-service date:		1/2023	(EXPECTED)
(5)	Fuel			
	a. Primary fuel:		SOLAR	
	b. Alternate fuel:		N/A	
(6)	Air Pollution Control Strategy:		N/A	
(7)	Cooling Method:		N/A	
(8)	Total Site Area:		~500-600 ACRES	
(9)	Construction Status:		PLANNED	
(10)	Certification Status:			
(11)	Status with Federal Agencies:			
(12)	Projected Unit Performance Data			
	a. Planned Outage Factor (POF):		N/A %	
	b. Forced Outage Factor (FOF):		N/A %	
	c. Equivalent Availability Factor (EAF):		N/A %	
	d. Resulting Capacity Factor (%):		~28 %	
	e. Average Net Operating Heat Rate (ANOHR):		N/A BTU/Kwh	
(13)	Projected Unit Financial Data			
	a. Book Life (Years):		30	
	b. Total Installed Cost (In-service year $/Kw):		1,272.64	
	c. Direct Construction Cost ($/Kw ac):	($2022)		
	d. AFUDC Amount ($/Kw):			
	e. Escalation ($/Kw):			
	f. Fixed O&M ($/Kw dc-yr):	($2022)	9.39	
	g. Variable O&M ($/MWh):	($2022)	0.00	
	h. K Factor:		NO CALCULATION	

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2022

(1)	Plant Name and Unit Number:	**Hardeetown**	
(2)	Capacity		
	a. Nameplate (MWac):	74.9	
	b. Summer Firm (MWac):	42.7	
	c. Winter Firm (MWac):	-	
(3)	Technology Type:	PHOTOVOLTAIC	
(4)	Anticipated Construction Timing		
	a. Field construction start date:	5/2022	
	b. Commercial in-service date:	1/2023	(EXPECTED)
(5)	Fuel		
	a. Primary fuel:	SOLAR	
	b. Alternate fuel:	N/A	
(6)	Air Pollution Control Strategy:	N/A	
(7)	Cooling Method:	N/A	
(8)	Total Site Area:	~500-600 ACRES	
(9)	Construction Status:	PLANNED	
(10)	Certification Status:		
(11)	Status with Federal Agencies:		
(12)	Projected Unit Performance Data		
	a. Planned Outage Factor (POF):	N/A %	
	b. Forced Outage Factor (FOF):	N/A %	
	c. Equivalent Availability Factor (EAF):	N/A %	
	d. Resulting Capacity Factor (%):	~28 %	
	e. Average Net Operating Heat Rate (ANOHR):	N/A BTU/Kwh	
(13)	Projected Unit Financial Data		
	a. Book Life (Years):	30	
	b. Total Installed Cost (In-service year $/Kw):	1,272.64	
	c. Direct Construction Cost ($/Kw ac): ($2022)		
	d. AFUDC Amount ($/Kw):		
	e. Escalation ($/Kw):		
	f. Fixed O&M ($/Kw dc-yr): ($2022)	9.39	
	g. Variable O&M ($/MWh): ($2022)	0.00	
	h. K Factor:	NO CALCULATION	

DUKE ENERGY FLORIDA

SCHEDULE 9
STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2022

(1)	Plant Name and Unit Number:	**High Springs**	
(2)	Capacity		
	a. Nameplate (MWac):	74.9	
	b. Summer Firm (MWac):	42.7	
	c. Winter Firm (MWac):	-	
(3)	Technology Type:	PHOTOVOLTAIC	
(4)	Anticipated Construction Timing		
	a. Field construction start date:	6/2022	
	b. Commercial in-service date:	2/2023	(EXPECTED)
(5)	Fuel		
	a. Primary fuel:	SOLAR	
	b. Alternate fuel:	N/A	
(6)	Air Pollution Control Strategy:	N/A	
(7)	Cooling Method:	N/A	
(8)	Total Site Area:	~500-600 ACRES	
(9)	Construction Status:	PLANNED	
(10)	Certification Status:		
(11)	Status with Federal Agencies:		
(12)	Projected Unit Performance Data		
	a. Planned Outage Factor (POF):	N/A %	
	b. Forced Outage Factor (FOF):	N/A %	
	c. Equivalent Availability Factor (EAF):	N/A %	
	d. Resulting Capacity Factor (%):	~28 %	
	e. Average Net Operating Heat Rate (ANOHR):	N/A BTU/Kwh	
(13)	Projected Unit Financial Data		
	a. Book Life (Years):	30	
	b. Total Installed Cost (In-service year $/Kw):	1,272.64	
	c. Direct Construction Cost ($/Kw ac): ($2022)		
	d. AFUDC Amount ($/Kw):		
	e. Escalation ($/Kw):		
	f. Fixed O&M ($/Kw dc-yr): ($2022)	9.39	
	g. Variable O&M ($/MWh): ($2022)	0.00	
	h. K Factor:	NO CALCULATION	

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2022

(1)	Plant Name and Unit Number:		**TBD**	
(2)	Capacity			
	a. Nameplate (MWac):		299.6	
	b. Summer Firm (MWac):		170.8	
	c. Winter Firm (MWac):		-	
(3)	Technology Type:		PHOTOVOLTAIC	
(4)	Anticipated Construction Timing			
	a. Field construction start date:		5/2023	
	b. Commercial in-service date:		1/2024	(EXPECTED)
(5)	Fuel			
	a. Primary fuel:		SOLAR	
	b. Alternate fuel:		N/A	
(6)	Air Pollution Control Strategy:		N/A	
(7)	Cooling Method:		N/A	
(8)	Total Site Area:		~500-600 ACRES PER SOLAR SITE (74.9 MW)	
(9)	Construction Status:		PLANNED	
(10)	Certification Status:			
(11)	Status with Federal Agencies:			
(12)	Projected Unit Performance Data			
	a. Planned Outage Factor (POF):		N/A	%
	b. Forced Outage Factor (FOF):		N/A	%
	c. Equivalent Availability Factor (EAF):		N/A	%
	d. Resulting Capacity Factor (%):		~28	%
	e. Average Net Operating Heat Rate (ANOHR):		N/A	BTU/Kwh
(13)	Projected Unit Financial Data			
	a. Book Life (Years):		30	
	b. Total Installed Cost (In-service year $/Kw):		1,221.86	
	c. Direct Construction Cost ($/Kw ac):	($2022)		
	d. AFUDC Amount ($/Kw):			
	e. Escalation ($/Kw):			
	f. Fixed O&M ($/Kw dc-yr):	($2022)	10.19	
	g. Variable O&M ($/MWh):	($2022)	0.00	
	h. K Factor:		NO CALCULATION	

DUKE ENERGY FLORIDA

SCHEDULE 9
STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2022

(1)	Plant Name and Unit Number:		**TBD**	
(2)	Capacity			
	a. Nameplate (MWac):		149.8	
	b. Summer Firm (MWac):		37.5	
	c. Winter Firm (MWac):		-	
(3)	Technology Type:		PHOTOVOLTAIC	
(4)	Anticipated Construction Timing			
	a. Field construction start date:		11/2023	
	b. Commercial in-service date:		7/2024	(EXPECTED)
(5)	Fuel			
	a. Primary fuel:		SOLAR	
	b. Alternate fuel:		N/A	
(6)	Air Pollution Control Strategy:		N/A	
(7)	Cooling Method:		N/A	
(8)	Total Site Area:		~500-600 ACRES PER SOLAR SITE (74.9 MW)	
(9)	Construction Status:		PLANNED	
(10)	Certification Status:			
(11)	Status with Federal Agencies:			
(12)	Projected Unit Performance Data			
	a. Planned Outage Factor (POF):			N/A %
	b. Forced Outage Factor (FOF):			N/A %
	c. Equivalent Availability Factor (EAF):			N/A %
	d. Resulting Capacity Factor (%):			~29 %
	e. Average Net Operating Heat Rate (ANOHR):			N/A BTU/Kwh
(13)	Projected Unit Financial Data			
	a. Book Life (Years):			30
	b. Total Installed Cost (In-service year $/Kw):			
	c. Direct Construction Cost ($/Kw ac):	($2022)		
	d. AFUDC Amount ($/Kw):			
	e. Escalation ($/Kw):			
	f. Fixed O&M ($/Kw dc-yr):	($2022)		
	g. Variable O&M ($/MWh):	($2022)		0.00
	h. K Factor:		NO CALCULATION	

DUKE ENERGY FLORIDA

SCHEDULE 9
STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2022

(1)	Plant Name and Unit Number:		**TBD**	
(2)	Capacity			
	a. Nameplate (MWac):		299.6	
	b. Summer Firm (MWac):		74.9	
	c. Winter Firm (MWac):		-	
(3)	Technology Type:		PHOTOVOLTAIC	
(4)	Anticipated Construction Timing			
	a. Field construction start date:		11/2024	
	b. Commercial in-service date:		7/2025	(EXPECTED)
(5)	Fuel			
	a. Primary fuel:		SOLAR	
	b. Alternate fuel:		N/A	
(6)	Air Pollution Control Strategy:		N/A	
(7)	Cooling Method:		N/A	
(8)	Total Site Area:		~500-600 ACRES PER SOLAR SITE (74.9 MW)	
(9)	Construction Status:		PLANNED	
(10)	Certification Status:			
(11)	Status with Federal Agencies:			
(12)	Projected Unit Performance Data			
	a. Planned Outage Factor (POF):			N/A %
	b. Forced Outage Factor (FOF):			N/A %
	c. Equivalent Availability Factor (EAF):			N/A %
	d. Resulting Capacity Factor (%):			~29 %
	e. Average Net Operating Heat Rate (ANOHR):			N/A BTU/Kwh
(13)	Projected Unit Financial Data			
	a. Book Life (Years):			30
	b. Total Installed Cost (In-service year $/Kw):			
	c. Direct Construction Cost ($/Kw ac):	($2022)		
	d. AFUDC Amount ($/Kw):			
	e. Escalation ($/Kw):			
	f. Fixed O&M ($/Kw dc-yr):	($2022)		
	g. Variable O&M ($/MWh):	($2022)		0.00
	h. K Factor:		NO CALCULATION	

DUKE ENERGY FLORIDA

SCHEDULE 9
STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2022

(1)	Plant Name and Unit Number:		**TBD**	
(2)	Capacity			
	a. Nameplate (MWac):		299.6	
	b. Summer Firm (MWac):		74.9	
	c. Winter Firm (MWac):		-	
(3)	Technology Type:		PHOTOVOLTAIC	
(4)	Anticipated Construction Timing			
	a. Field construction start date:		11/2025	
	b. Commercial in-service date:		7/2026	(EXPECTED)
(5)	Fuel			
	a. Primary fuel:		SOLAR	
	b. Alternate fuel:		N/A	
(6)	Air Pollution Control Strategy:		N/A	
(7)	Cooling Method:		N/A	
(8)	Total Site Area:		~500-600 ACRES PER SOLAR SITE (74.9 MW)	
(9)	Construction Status:		PLANNED	
(10)	Certification Status:			
(11)	Status with Federal Agencies:			
(12)	Projected Unit Performance Data			
	a. Planned Outage Factor (POF):			N/A %
	b. Forced Outage Factor (FOF):			N/A %
	c. Equivalent Availability Factor (EAF):			N/A %
	d. Resulting Capacity Factor (%):			~29 %
	e. Average Net Operating Heat Rate (ANOHR):			N/A BTU/Kwh
(13)	Projected Unit Financial Data			
	a. Book Life (Years):			30
	b. Total Installed Cost (In-service year $/Kw):			
	c. Direct Construction Cost ($/Kw ac):	($2022)		
	d. AFUDC Amount ($/Kw):			
	e. Escalation ($/Kw):			
	f. Fixed O&M ($/Kw dc-yr):	($2022)		
	g. Variable O&M ($/MWh):	($2022)		0.00
	h. K Factor:		NO CALCULATION	

DUKE ENERGY FLORIDA

SCHEDULE 9
STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2022

(1)	Plant Name and Unit Number:		**TBD**	
(2)	Capacity			
	a. Nameplate (MWac):		299.6	
	b. Summer Firm (MWac):		74.9	
	c. Winter Firm (MWac):		-	
(3)	Technology Type:		PHOTOVOLTAIC	
(4)	Anticipated Construction Timing			
	a. Field construction start date:		11/2026	
	b. Commercial in-service date:		7/2027	(EXPECTED)
(5)	Fuel			
	a. Primary fuel:		SOLAR	
	b. Alternate fuel:		N/A	
(6)	Air Pollution Control Strategy:		N/A	
(7)	Cooling Method:		N/A	
(8)	Total Site Area:		~500-600 ACRES PER SOLAR SITE (74.9 MW)	
(9)	Construction Status:		PLANNED	
(10)	Certification Status:			
(11)	Status with Federal Agencies:			
(12)	Projected Unit Performance Data			
	a. Planned Outage Factor (POF):			N/A %
	b. Forced Outage Factor (FOF):			N/A %
	c. Equivalent Availability Factor (EAF):			N/A %
	d. Resulting Capacity Factor (%):			~29 %
	e. Average Net Operating Heat Rate (ANOHR):			N/A BTU/Kwh
(13)	Projected Unit Financial Data			
	a. Book Life (Years):			30
	b. Total Installed Cost (In-service year $/Kw):			
	c. Direct Construction Cost ($/Kw ac):	($2022)		
	d. AFUDC Amount ($/Kw):			
	e. Escalation ($/Kw):			
	f. Fixed O&M ($/Kw dc-yr):	($2022)		
	g. Variable O&M ($/MWh):	($2022)		0.00
	h. K Factor:		NO CALCULATION	

DUKE ENERGY FLORIDA

SCHEDULE 9
STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2022

(1)	Plant Name and Unit Number:		**TBD**	
(2)	Capacity			
	a. Nameplate (MWac):		299.6	
	b. Summer Firm (MWac):		74.9	
	c. Winter Firm (MWac):		-	
(3)	Technology Type:		PHOTOVOLTAIC	
(4)	Anticipated Construction Timing			
	a. Field construction start date:		11/2027	
	b. Commercial in-service date:		7/2028	(EXPECTED)
(5)	Fuel			
	a. Primary fuel:		SOLAR	
	b. Alternate fuel:		N/A	
(6)	Air Pollution Control Strategy:		N/A	
(7)	Cooling Method:		N/A	
(8)	Total Site Area:		~500-600 ACRES PER SOLAR SITE (74.9 MW)	
(9)	Construction Status:		PLANNED	
(10)	Certification Status:			
(11)	Status with Federal Agencies:			
(12)	Projected Unit Performance Data			
	a. Planned Outage Factor (POF):			N/A %
	b. Forced Outage Factor (FOF):			N/A %
	c. Equivalent Availability Factor (EAF):			N/A %
	d. Resulting Capacity Factor (%):			~29 %
	e. Average Net Operating Heat Rate (ANOHR):			N/A BTU/Kwh
(13)	Projected Unit Financial Data			
	a. Book Life (Years):			30
	b. Total Installed Cost (In-service year $/Kw):			
	c. Direct Construction Cost ($/Kw ac):	($2022)		
	d. AFUDC Amount ($/Kw):			
	e. Escalation ($/Kw):			
	f. Fixed O&M ($/Kw dc-yr):	($2022)		
	g. Variable O&M ($/MWh):	($2022)		0.00
	h. K Factor:		NO CALCULATION	

DUKE ENERGY FLORIDA

SCHEDULE 9
STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2022

(1)	Plant Name and Unit Number:		**Undesignated CT P1**	
(2)	Capacity			
	a. Summer (MWs):		214	
	b. Winter (MWs):		234	
(3)	Technology Type:		COMBUSTION TURBINE	
(4)	Anticipated Construction Timing			
	a. Field construction start date:		7/2026	
	b. Commercial in-service date:		6/2029	(EXPECTED)
(5)	Fuel			
	a. Primary fuel:		NATURAL GAS	
	b. Alternate fuel:		DISTILLATE FUEL OIL	
(6)	Air Pollution Control Strategy:		Dry Low Nox Combustion	
(7)	Cooling Method:		N/A	
(8)	Total Site Area:		UNKNOWN	
(9)	Construction Status:		PLANNED	
(10)	Certification Status:		PLANNED	
(11)	Status with Federal Agencies:		PLANNED	
(12)	Projected Unit Performance Data			
	a. Planned Outage Factor (POF):		3.00	%
	b. Forced Outage Factor (FOF):		2.00	%
	c. Equivalent Availability Factor (EAF):		95.06	
	d. Resulting Capacity Factor (%):		5.2	%
	e. Average Net Operating Heat Rate (ANOHR):		10,633	BTU/kWh
(13)	Projected Unit Financial Data			
	a. Book Life (Years):		35	
	b. Total Installed Cost (In-service year $/kW):		799.0	
	c. Direct Construction Cost ($/kW):	($2022)	697.3	
	d. AFUDC Amount ($/kW):		62.0	
	e. Escalation ($/kW):		39.7	
	f. Fixed O&M ($/kW-yr):	($2022)	2.39	
	g. Variable O&M ($/MWh):	($2022)	9.61	
	h. K Factor:		NO CALCULATION	

NOTES
Total Installed Cost includes gas expansion, transmission interconnection and integration
$/kW values are based on Summer capacity
Fixed O&M cost does not include firm gas transportation costs

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2022

(1)	Plant Name and Unit Number:		**TBD**	
(2)	Capacity			
	a. Nameplate (MWac):		149.8	
	b. Summer Firm (MWac):		18.7	
	c. Winter Firm (MWac):		-	
(3)	Technology Type:		PHOTOVOLTAIC	
(4)	Anticipated Construction Timing			
	a. Field construction start date:		11/2028	
	b. Commercial in-service date:		7/2029	(EXPECTED)
(5)	Fuel			
	a. Primary fuel:		SOLAR	
	b. Alternate fuel:		N/A	
(6)	Air Pollution Control Strategy:		N/A	
(7)	Cooling Method:		N/A	
(8)	Total Site Area:		~500-600 ACRES PER SOLAR SITE (74.9 MW)	
(9)	Construction Status:		PLANNED	
(10)	Certification Status:			
(11)	Status with Federal Agencies:			
(12)	Projected Unit Performance Data			
	a. Planned Outage Factor (POF):			N/A %
	b. Forced Outage Factor (FOF):			N/A %
	c. Equivalent Availability Factor (EAF):			N/A %
	d. Resulting Capacity Factor (%):			~29 %
	e. Average Net Operating Heat Rate (ANOHR):			N/A BTU/Kwh
(13)	Projected Unit Financial Data			
	a. Book Life (Years):			30
	b. Total Installed Cost (In-service year $/Kw):			
	c. Direct Construction Cost ($/Kw ac):	($2022)		
	d. AFUDC Amount ($/Kw):			
	e. Escalation ($/Kw):			
	f. Fixed O&M ($/Kw dc-yr):	($2022)		
	g. Variable O&M ($/MWh):	($2022)		0.00
	h. K Factor:		NO CALCULATION	

DUKE ENERGY FLORIDA

SCHEDULE 9
STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2022

(1)	Plant Name and Unit Number:	**TBD**		
(2)	Capacity			
	a. Nameplate (MWac):	149.8		
	b. Summer Firm (MWac):	18.7		
	c. Winter Firm (MWac):	18.7		
(3)	Technology Type:	PHOTOVOLTAIC WITH BATTERY STORAGE		
(4)	Anticipated Construction Timing			
	a. Field construction start date:	11/2028		
	b. Commercial in-service date:	7/2029		(EXPECTED)
(5)	Fuel			
	a. Primary fuel:	SOLAR		
	b. Alternate fuel:	N/A		
(6)	Air Pollution Control Strategy:	N/A		
(7)	Cooling Method:	N/A		
(8)	Total Site Area:	~500-600 ACRES PER SOLAR SITE (74.9 MW)		
(9)	Construction Status:	PLANNED		
(10)	Certification Status:			
(11)	Status with Federal Agencies:			
(12)	Projected Unit Performance Data			
	a. Planned Outage Factor (POF):		N/A %	
	b. Forced Outage Factor (FOF):		N/A %	
	c. Equivalent Availability Factor (EAF):		N/A %	
	d. Resulting Capacity Factor (%):		~33 %	
	e. Average Net Operating Heat Rate (ANOHR):		N/A BTU/Kwh	
(13)	Projected Unit Financial Data			
	a. Book Life (Years):		30	
	b. Total Installed Cost (In-service year $/Kw):			
	c. Direct Construction Cost ($/Kw ac): ($2022)			
	d. AFUDC Amount ($/Kw):			
	e. Escalation ($/Kw):			
	f. Fixed O&M ($/Kw dc-yr): ($2022)			
	g. Variable O&M ($/MWh): ($2022)		0.00	
	h. K Factor:	NO CALCULATION		

DUKE ENERGY FLORIDA

SCHEDULE 9
STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2022

(1)	Plant Name and Unit Number:		**TBD**	
(2)	Capacity			
	a. Nameplate (MWac):		149.8	
	b. Summer Firm (MWac):		18.7	
	c. Winter Firm (MWac):		-	
(3)	Technology Type:		PHOTOVOLTAIC	
(4)	Anticipated Construction Timing			
	a. Field construction start date:		11/2029	
	b. Commercial in-service date:		7/2030	(EXPECTED)
(5)	Fuel			
	a. Primary fuel:		SOLAR	
	b. Alternate fuel:		N/A	
(6)	Air Pollution Control Strategy:		N/A	
(7)	Cooling Method:		N/A	
(8)	Total Site Area:		~500-600 ACRES PER SOLAR SITE (74.9 MW)	
(9)	Construction Status:		PLANNED	
(10)	Certification Status:			
(11)	Status with Federal Agencies:			
(12)	Projected Unit Performance Data			
	a. Planned Outage Factor (POF):			N/A %
	b. Forced Outage Factor (FOF):			N/A %
	c. Equivalent Availability Factor (EAF):			N/A %
	d. Resulting Capacity Factor (%):			~29 %
	e. Average Net Operating Heat Rate (ANOHR):			N/A BTU/Kwh
(13)	Projected Unit Financial Data			
	a. Book Life (Years):			30
	b. Total Installed Cost (In-service year $/Kw):			
	c. Direct Construction Cost ($/Kw ac):	($2022)		
	d. AFUDC Amount ($/Kw):			
	e. Escalation ($/Kw):			
	f. Fixed O&M ($/Kw dc-yr):	($2022)		
	g. Variable O&M ($/MWh):	($2022)		0.00
	h. K Factor:		NO CALCULATION	

DUKE ENERGY FLORIDA

SCHEDULE 9
STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2022

(1)	Plant Name and Unit Number:	**TBD**	
(2)	Capacity		
	a. Nameplate (MWac):	149.8	
	b. Summer Firm (MWac):	18.7	
	c. Winter Firm (MWac):	18.7	
(3)	Technology Type:	PHOTOVOLTAIC WITH BATTERY STORAGE	
(4)	Anticipated Construction Timing		
	a. Field construction start date:	11/2029	
	b. Commercial in-service date:	7/2030	(EXPECTED)
(5)	Fuel		
	a. Primary fuel:	SOLAR	
	b. Alternate fuel:	N/A	
(6)	Air Pollution Control Strategy:	N/A	
(7)	Cooling Method:	N/A	
(8)	Total Site Area:	~500-600 ACRES PER SOLAR SITE (74.9 MW)	
(9)	Construction Status:	PLANNED	
(10)	Certification Status:		
(11)	Status with Federal Agencies:		
(12)	Projected Unit Performance Data		
	a. Planned Outage Factor (POF):		N/A %
	b. Forced Outage Factor (FOF):		N/A %
	c. Equivalent Availability Factor (EAF):		N/A %
	d. Resulting Capacity Factor (%):		~33 %
	e. Average Net Operating Heat Rate (ANOHR):		N/A BTU/Kwh
(13)	Projected Unit Financial Data		
	a. Book Life (Years):		30
	b. Total Installed Cost (In-service year $/Kw):		
	c. Direct Construction Cost ($/Kw ac): ($2022)		
	d. AFUDC Amount ($/Kw):		
	e. Escalation ($/Kw):		
	f. Fixed O&M ($/Kw dc-yr): ($2022)		
	g. Variable O&M ($/MWh): ($2022)		0.00
	h. K Factor:	NO CALCULATION	

DUKE ENERGY FLORIDA

SCHEDULE 9
STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2022

(1)	Plant Name and Unit Number:		**TBD**	
(2)	Capacity			
	a. Nameplate (MWac):		149.8	
	b. Summer Firm (MWac):		18.7	
	c. Winter Firm (MWac):		-	
(3)	Technology Type:		PHOTOVOLTAIC	
(4)	Anticipated Construction Timing			
	a. Field construction start date:		11/2030	
	b. Commercial in-service date:		7/2031	(EXPECTED)
(5)	Fuel			
	a. Primary fuel:		SOLAR	
	b. Alternate fuel:		N/A	
(6)	Air Pollution Control Strategy:		N/A	
(7)	Cooling Method:		N/A	
(8)	Total Site Area:		~500-600 ACRES PER SOLAR SITE (74.9 MW)	
(9)	Construction Status:		PLANNED	
(10)	Certification Status:			
(11)	Status with Federal Agencies:			
(12)	Projected Unit Performance Data			
	a. Planned Outage Factor (POF):			N/A %
	b. Forced Outage Factor (FOF):			N/A %
	c. Equivalent Availability Factor (EAF):			N/A %
	d. Resulting Capacity Factor (%):			~29 %
	e. Average Net Operating Heat Rate (ANOHR):			N/A BTU/Kwh
(13)	Projected Unit Financial Data			
	a. Book Life (Years):			30
	b. Total Installed Cost (In-service year $/Kw):			
	c. Direct Construction Cost ($/Kw ac):	($2022)		
	d. AFUDC Amount ($/Kw):			
	e. Escalation ($/Kw):			
	f. Fixed O&M ($/Kw dc-yr):	($2022)		
	g. Variable O&M ($/MWh):	($2022)		0.00
	h. K Factor:		NO CALCULATION	

DUKE ENERGY FLORIDA

SCHEDULE 9
STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2022

(1)	Plant Name and Unit Number:		**TBD**	
(2)	Capacity			
	a. Nameplate (MWac):		149.8	
	b. Summer Firm (MWac):		18.7	
	c. Winter Firm (MWac):		18.7	
(3)	Technology Type:		PHOTOVOLTAIC WITH BATTERY STORAGE	
(4)	Anticipated Construction Timing			
	a. Field construction start date:		11/2030	
	b. Commercial in-service date:		7/2031	(EXPECTED)
(5)	Fuel			
	a. Primary fuel:		SOLAR	
	b. Alternate fuel:		N/A	
(6)	Air Pollution Control Strategy:		N/A	
(7)	Cooling Method:		N/A	
(8)	Total Site Area:		~500-600 ACRES PER SOLAR SITE (74.9 MW)	
(9)	Construction Status:		PLANNED	
(10)	Certification Status:			
(11)	Status with Federal Agencies:			
(12)	Projected Unit Performance Data			
	a. Planned Outage Factor (POF):			N/A %
	b. Forced Outage Factor (FOF):			N/A %
	c. Equivalent Availability Factor (EAF):			N/A %
	d. Resulting Capacity Factor (%):			~33 %
	e. Average Net Operating Heat Rate (ANOHR):			N/A BTU/Kwh
(13)	Projected Unit Financial Data			
	a. Book Life (Years):			30
	b. Total Installed Cost (In-service year $/Kw):			
	c. Direct Construction Cost ($/Kw ac):	($2022)		
	d. AFUDC Amount ($/Kw):			
	e. Escalation ($/Kw):			
	f. Fixed O&M ($/Kw dc-yr):	($2022)		
	g. Variable O&M ($/MWh):	($2022)		0.00
	h. K Factor:		NO CALCULATION	

DUKE ENERGY FLORIDA

SCHEDULE 10

STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

BAY TRAIL SOLAR

(1) POINT OF ORIGIN AND TERMINATION:	Citrus Combined Cycle
(2) NUMBER OF LINES:	1
(3) RIGHT-OF-WAY:	New and existing transmission line right-of-way
(4) LINE LENGTH:	1.1 miles
(5) VOLTAGE:	230 kV
(6) ANTICIPATED CONSTRUCTION TIMING:	4/1/2022
(7) ANTICIPATED CAPITAL INVESTMENT:	$1,500,000
(8) SUBSTATIONS:	Citrus Combined Cycle
(9) PARTICIPATION WITH OTHER UTILITIES:	N/A

DUKE ENERGY FLORIDA

SCHEDULE 10
STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

SANDY CREEK SOLAR

(1) POINT OF ORIGIN AND TERMINATION:	Ladybug Substation
(2) NUMBER OF LINES:	1
(3) RIGHT-OF-WAY:	New and existing transmission line right-of-way
(4) LINE LENGTH:	0.03 miles
(5) VOLTAGE:	230 kV
(6) ANTICIPATED CONSTRUCTION TIMING:	4/1/2022
(7) ANTICIPATED CAPITAL INVESTMENT:	$2,800,000
(8) SUBSTATIONS:	Ladybug Substation
(9) PARTICIPATION WITH OTHER UTILITIES:	N/A

DUKE ENERGY FLORIDA

SCHEDULE 10

STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

FORT GREEN SOLAR

(1) POINT OF ORIGIN AND TERMINATION:	Fort Green Springs Substation
(2) NUMBER OF LINES:	1
(3) RIGHT-OF-WAY:	Existing transmission line right-of-way
(4) LINE LENGTH:	0.03 miles
(5) VOLTAGE:	69 kV
(6) ANTICIPATED CONSTRUCTION TIMING:	5/1/2022
(7) ANTICIPATED CAPITAL INVESTMENT:	$2,370,000
(8) SUBSTATIONS:	Fort Green Springs Substation
(9) PARTICIPATION WITH OTHER UTILITIES:	N/A

DUKE ENERGY FLORIDA

SCHEDULE 10

STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

CHARLIE CREEK SOLAR

(1) POINT OF ORIGIN AND TERMINATION:	Singletary Substation
(2) NUMBER OF LINES:	1
(3) RIGHT-OF-WAY:	Existing transmission line right-of-way
(4) LINE LENGTH:	0.04 miles
(5) VOLTAGE:	230 kV
(6) ANTICIPATED CONSTRUCTION TIMING:	8/1/2022
(7) ANTICIPATED CAPITAL INVESTMENT:	$1,771,000
(8) SUBSTATIONS:	Singletary Substation
(9) PARTICIPATION WITH OTHER UTILITIES:	N/A

DUKE ENERGY FLORIDA

SCHEDULE 10
STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

BAY RANCH SOLAR

(1) POINT OF ORIGIN AND TERMINATION:	Honeybee Switching Station
(2) NUMBER OF LINES:	1
(3) RIGHT-OF-WAY:	Existing transmission line right-of-way
(4) LINE LENGTH:	0.03 miles
(5) VOLTAGE:	230 kV
(6) ANTICIPATED CONSTRUCTION TIMING:	1/1/2023
(7) ANTICIPATED CAPITAL INVESTMENT:	$2,834,000
(8) SUBSTATIONS:	Honeybee Switching Station
(9) PARTICIPATION WITH OTHER UTILITIES:	N/A

DUKE ENERGY FLORIDA

SCHEDULE 10
STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

HILDRETH SOLAR

(1) POINT OF ORIGIN AND TERMINATION:	Hickory Switching Station
(2) NUMBER OF LINES:	1
(3) RIGHT-OF-WAY:	Existing transmission line right-of-way
(4) LINE LENGTH:	0.03 miles
(5) VOLTAGE:	69 kV
(6) ANTICIPATED CONSTRUCTION TIMING:	1/1/2023
(7) ANTICIPATED CAPITAL INVESTMENT:	$2,452,000
(8) SUBSTATIONS:	Hickory Switching Station
(9) PARTICIPATION WITH OTHER UTILITIES:	N/A

DUKE ENERGY FLORIDA

SCHEDULE 10
STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

HARDEETOWN SOLAR

(1) POINT OF ORIGIN AND TERMINATION:	Chiefland Substation
(2) NUMBER OF LINES:	1
(3) RIGHT-OF-WAY:	New and existing transmission line right-of-way
(4) LINE LENGTH:	0.07 miles
(5) VOLTAGE:	69 kV
(6) ANTICIPATED CONSTRUCTION TIMING:	1/1/2023
(7) ANTICIPATED CAPITAL INVESTMENT:	$2,245,000
(8) SUBSTATIONS:	Chiefland Substation
(9) PARTICIPATION WITH OTHER UTILITIES:	N/A

DUKE ENERGY FLORIDA

SCHEDULE 10

STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

HIGH SPRINGS SOLAR

(1) POINT OF ORIGIN AND TERMINATION:	Ginnie Substation
(2) NUMBER OF LINES:	1
(3) RIGHT-OF-WAY:	New and existing transmission line right-of-way
(4) LINE LENGTH:	0.06 miles
(5) VOLTAGE:	69 kV
(6) ANTICIPATED CONSTRUCTION TIMING:	2/1/2023
(7) ANTICIPATED CAPITAL INVESTMENT:	$1,497,000
(8) SUBSTATIONS:	Ginnie Substation
(9) PARTICIPATION WITH OTHER UTILITIES:	N/A

DUKE ENERGY FLORIDA

SCHEDULE 10
STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

OSPREY

(1) POINT OF ORIGIN AND TERMINATION:	Kathleen - Osprey
(2) NUMBER OF LINES:	1
(3) RIGHT-OF-WAY:	New transmission line right-of-way
(4) LINE LENGTH:	26.5 miles
(5) VOLTAGE:	230 kV
(6) ANTICIPATED CONSTRUCTION TIMING:	11/1/2024
(7) ANTICIPATED CAPITAL INVESTMENT:	$150,000,000
(8) SUBSTATIONS:	Kathleen, Osprey
(9) PARTICIPATION WITH OTHER UTILITIES:	N/A

INTEGRATED RESOURCE PLANNING OVERVIEW

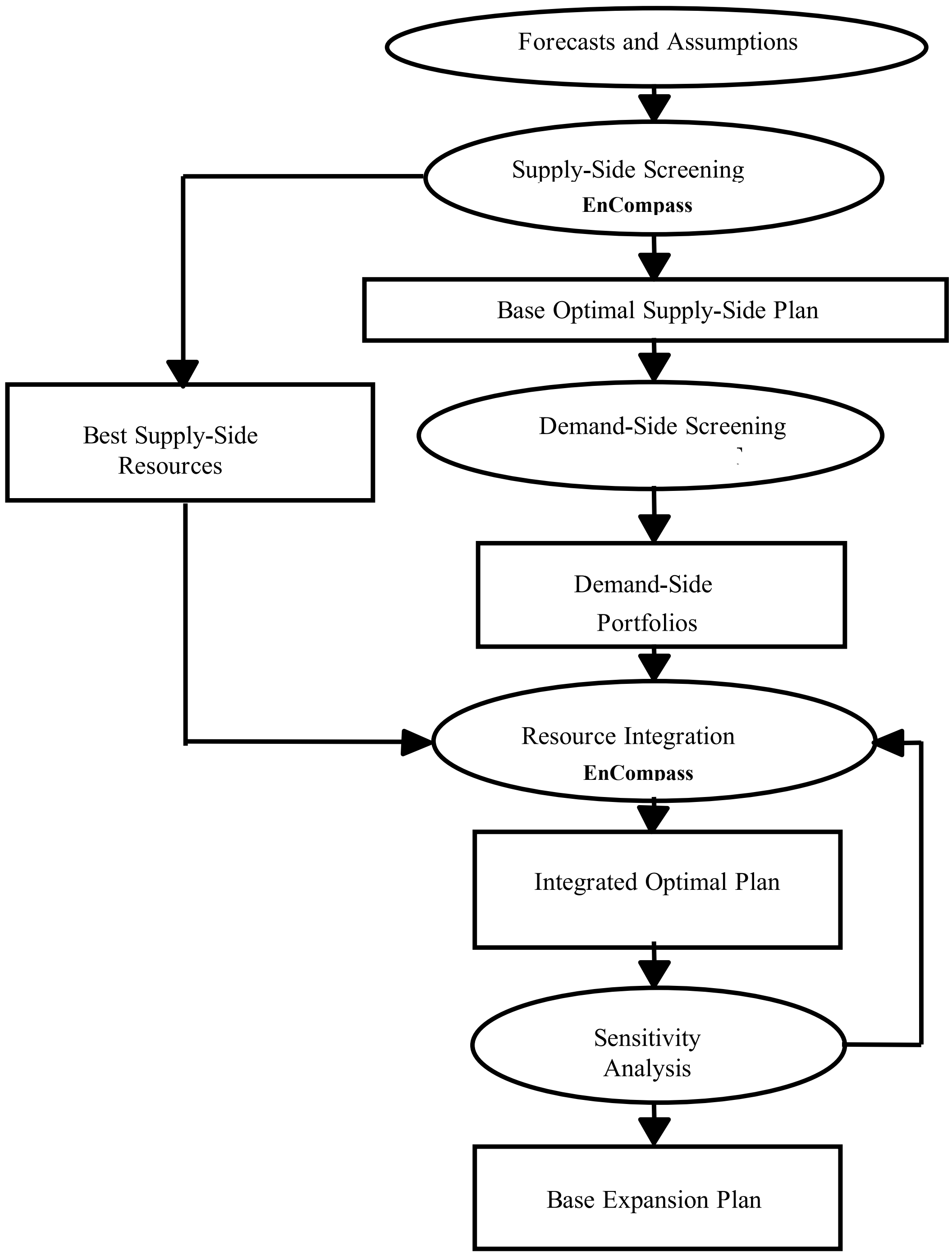
DEF employs an Integrated Resource Planning (IRP) process to determine the most cost-effective mix of supply- and demand-side alternatives that will reliably satisfy our customers' future demand and energy needs. DEF's IRP process incorporates state-of-the-art computer models used to evaluate a wide range of future generation alternatives and cost-effective conservation and dispatchable demand-side management programs on a consistent and integrated basis.

An overview of DEF's IRP Process is shown in Figure 3.1. The process begins with the development of various forecasts, including demand and energy, fuel prices, and economic assumptions. Future supply- and demand-side resource alternatives are identified, and extensive cost and operating data are collected to enable these to be modeled in detail. These alternatives are optimized together to determine the most cost-effective plan for DEF to pursue over the next ten years that meets the reliability criteria for our customers. The resulting ten-year plan, the Integrated Optimal Plan, is then tested under different relevant sensitivity scenarios to identify variances, if any, which would warrant reconsideration of any of the base plan assumptions. If the plan is judged robust and works within the corporate framework, it evolves as the Base Expansion Plan. This process is discussed in more detail in the following section titled "The Integrated Resource Planning (IRP) Process".

The IRP provides DEF with substantial guidance in assessing and optimizing the Company's overall resource mix on both the supply side and the demand side. When a decision supporting a significant resource commitment is being developed (e.g., plant construction, power purchase, DSM program implementation), the Company will move forward with directional guidance from the IRP and delve much further into the specific levels of examination required. This more detailed assessment will typically address very specific technical requirements and cost estimates, detailed corporate financial considerations, and the most current dynamics of the business and regulatory environments.

FIGURE 3.1

Integrated Resource Planning (IRP) Process Overview



THE INTEGRATED RESOURCE PLANNING (IRP) PROCESS

Forecasts and Assumptions

The evaluation of possible supply- and demand-side alternatives, and development of the optimal plan, is an integral part of the IRP process. These steps together comprise the integration process that begins with the development of forecasts and collection of input data. Base forecasts that reflect DEF's view of the most likely future scenario are developed. Additional future scenarios along with high and low forecasts may also be developed. Computer models used in the process are brought up to date to reflect this data, along with the latest operating parameters and maintenance schedules for DEF's existing generating units. This establishes a consistent starting point for all further analysis.

Reliability Criteria

Utilities require a margin of generating capacity above the firm demands of their customers in order to provide reliable service. Periodic scheduled outages are required to perform maintenance and inspections of generating plant equipment. At any given time during the year, some capacity may be out of service due to unanticipated equipment failures resulting in forced outages of generation units. Adequate reserve capacity must be available to accommodate these outages and to compensate for higher than projected peak demand due to forecast uncertainty and abnormal weather. In addition, some capacity must be available for operating reserves to maintain the balance between supply and demand on a moment-to-moment basis.

DEF plans its resources in a manner consistent with utility industry planning practices and employs both deterministic and probabilistic reliability criteria in the resource planning process. A Reserve Margin criterion is used as a deterministic measure of DEF's ability to meet its forecasted seasonal peak load with firm capacity. DEF plans its resources to satisfy a minimum 20% Reserve Margin criterion.

Loss of Load Probability (LOLP) is a probabilistic criterion that measures the probability that a company will be unable to meet its load throughout the year. While Reserve Margin considers the peak load and amount of installed resources, LOLP considers generating unit sizes, capacity mix, maintenance scheduling, unit availabilities, and capacity assistance available from other utilities. A standard probabilistic reliability threshold commonly used in the electric utility industry, and the criterion employed by DEF, is a maximum of one day in ten years loss of load probability.

DEF has based its resource planning on the use of dual reliability criteria since the early 1990s, a practice that has been accepted by the FPSC. DEF's resource portfolio is designed to satisfy the 20% Reserve Margin requirement and probabilistic analyses are periodically conducted to ensure that the one day in ten years LOLP criterion is also satisfied. By using both the Reserve Margin and LOLP planning criteria, DEF's resource portfolio is designed to have sufficient capacity available to meet customer peak demand, and to provide reliable generation service under expected load conditions. DEF has found that resource additions are typically triggered to meet the 20% Reserve Margin thresholds before LOLP becomes a factor.

Supply-Side Screening

Potential supply-side resources are screened to determine those that are the most cost-effective. Data used for the screening analysis is compiled from various industry sources and DEF's experiences. The wide range of resource options is pre-screened to set aside those that do not warrant a detailed cost-effectiveness analysis. Typical screening criteria are costs, fuel source, technology maturity, environmental parameters (e.g., emissions, possible climate impact), and overall resource feasibility.

Economic evaluation of generation alternatives is performed using the Capacity Expansion module of the EnCompass Power Planning Software. This optimization tool evaluates revenue requirements for specific resource plans generated from multiple combinations of future resource additions that meet system reliability criteria and other system constraints. All resource plans are then ranked by system revenue requirements.

Demand-Side Screening

Like supply-side resources, the impacts of potential demand-side resources are also factored into the integrated resource plan. The projected MW and MWH impacts for demand-side management resources are based on the energy efficiency measures and load management programs included in DEF's 2015 DSM Plan and meet the goals established by the FPSC in December 2019 (Docket 20190018-EG).

Resource Integration and the Integrated Optimal Plan

The cost-effective generation alternatives can then be optimized together with the demand-side portfolios developed in the screening process to formulate integrated optimal plans. The optimization program considers all possible future combinations of supply- and demand-side alternatives that meet the Company's reliability criteria in each year of the ten-year study period and reports those that provide both flexibility and reasonable revenue requirements (rates) for DEF's customers. Candidate base plans are then evaluated using the Portfolio Optimization module of EnCompass. This provides hourly modeling of the portfolio dispatch and provides insights into the detailed energy production cost of a given portfolio, the emissions profile and helps to identify potential issues with unit operation and reliability.

Developing the Base Expansion Plan

The integrated optimized plan that provides the lowest revenue requirements may then be further tested using sensitivity analysis, including High and Low Demand and Energy Forecasts (see Schedules 2 and 3). The economics of the plan may be evaluated under high and low forecast scenarios for fuel, load and financial assumptions, or any other sensitivities which the planner deems relevant. From the sensitivity assessment, the plan that is identified as achieving the best balance of flexibility and cost is then reviewed within the corporate framework to determine how the plan potentially impacts or is impacted by many other factors. If the plan is judged robust under this review, it would then be considered the Base Expansion Plan.

KEY CORPORATE FORECASTS

Load Forecast

The assumptions and methodology used to develop the base case load and energy forecast are described in Chapter 2 of this TYSP. The High and Low forecasts of load and energy were provided to Resource Planning to test the robustness of the base plan.

Fuel Price Forecast

The base case fuel price forecast was developed using short-term and long-term spot market price projections from industry-recognized sources. The base cost for coal is based on the existing contracts and spot market coal prices and transportation arrangements between DEF and its various suppliers. For the longer term, the prices are based on spot market forecasts reflective of expected market conditions. Oil and natural gas prices are estimated based on current and expected contracts and spot purchase arrangements as well as near-term and long-term market forecasts. Oil and natural gas commodity prices are driven primarily by open market forces of supply and demand. Natural gas firm transportation cost is determined primarily by pipeline tariff rates.

Financial Forecast

The key financial assumptions used in DEF's most recent planning studies were 47% debt and 53% equity capital structure, projected cost of debt of 3.80%, and an equity return of 9.85%. The assumptions resulted in a weighted average cost of capital of 7.0% and an after-tax discount rate of 6.55%.

TEN-YEAR SITE PLAN (TYSP) RESOURCE ADDITIONS

DEF's planned supply resource additions and changes are shown in Schedule 8 and are referred to as DEF's Base Expansion Plan. This plan includes a net addition of over 3,100 MW of solar PV generation with an expected equivalent summer firm capacity contribution of approximately 960 MW, 110 MW of firm storage and 214 MW of new natural gas fired generation consisting of one planned combustion turbine unit added in year 2029, at undesignated sites as well as the incorporation of the full firm capacity of the Osprey Energy Center. DEF projects the addition of 150 MW of solar PV projects in year 2024 in addition to the Clean Energy Connection solar units and 300 MW of Solar PV projects every year from 2025 through 2031. As the cost of batteries continue to decline, 37.5 MW of storage will be added to 149.8 MW of Solar PV units per year from 2029 to 2031. This will help respond to solar intermittency and improve the reliability of the system. In DEF's approved rate settlement (FPSC Docket No. 20210016-EI), DEF anticipates the retirement of the two remaining coal units at Crystal River (Crystal River units 4 and 5) in 2034. Assuming the implementation of regulations requiring CO_2 emissions reductions by the latter part of the plan period, DEF believes that solar PV will be the most cost-effective generation to replace most of that energy in the 2034 timeframe. DEF's plan to construct 300 MW in each year from 2025 through 2031 provides a path to meeting this goal through a measured and paced approach to bringing the solar onto the system which recognizes the challenges of building and interconnecting solar projects, helps maintain reliability as solar penetration increases and maintains affordability in customer rates. As with other elements of the plan, DEF will update these projections as decision dates approach.

DEF continues to seek market supply-side resource alternatives to enhance DEF's resource plan. DEF recognizes that, as solar penetration increases, including both DEF and customer-owned PV, the total dependable solar resource capability is influencing or shifting DEF's reserve planning focus later beyond the on-peak period. DEF is accounting for this planning shift by deriving reduced summer capacity values of planned PV installations starting in 2025. Refer to Page 3-2 for additional solar resource capacity values that are accounting for this change.

DEF's Base Expansion Plan projects the need for additional capacity with estimated in-service dates during the ten-year period from 2022 through 2031. The planned capacity additions, together with purchases from Qualifying Facilities (QF), Investor Owned Utilities, and Independent Power Producers help the DEF system meet the energy requirements of its customer base. The capacity needs identified in this plan may be impacted by DEF's ability to extend or replace existing purchase power and QF contracts and to secure new renewable purchased power resources in their respective projected timeframes. The additions in the Base Expansion Plan depend, in part, on projected load growth, and obtaining all necessary state and federal permits under current schedules. Changes in these or other factors could impact DEF's Base Expansion Plan.

Through its ongoing planning process, DEF will continue to evaluate the timetables for all projected resource additions and assess alternatives for the future considering, among other things, projected load growth, fuel prices, lead times in the construction marketplace, project development timelines for new fuels and technologies, and environmental compliance considerations. The Company will continue to examine the merits of new generation alternatives and adjust its resource plans accordingly to ensure optimal selection of resource additions based on the best information available.

RENEWABLE ENERGY

DEF continues to secure renewable energy from the following facilities listed by fuel type:

Purchases from Municipal Solid Waste Facilities:

Pasco County Resource Recovery (23 MW)

Pinellas County Resource Recovery (54.8 MW)

Dade County Resource Recovery (As Available)

Lake County Resource Recovery (As Available)

Lee County Resource Recovery (As Available)

Purchases from Waste Heat from Exothermic Processes:

PCS Phosphate (As Available)

Citrus World (As Available)

Solar Photovoltaic Facilities

DEF-owned Solar Generation (586.55 MW)

- Osceola Solar Facility 3.8 MW
- Perry Solar Facility 5.1 MW
- Suwannee Solar Facility 8.8 MW
- Hamilton Solar Power Plant 74.9 MW
- Trenton Solar Power Plant 74.9 MW
- Lake Placid Solar Power Plant 45.0 MW
- St Petersburg Pier Solar Power Plant 0.35 MW
- DeBary Solar Power Plant 74.5 MW
- Columbia Solar Power Plant 74.9 MW
- Twin Rivers Solar Power Plant 74.9 MW
- Santa Fe Solar Power Plant 74.9 MW
- Duette Solar Power Plant 74.5 MW

Customer-owned renewable generation under DEF’s Net Metering Tariff (about 400 MW as of 12/31/21)

At this time, DEF is reviewing the potential for as-available purchased power contracts with third-party solar companies. In-service dates, however, are generally projected to be beyond 2022. As of December 31, 2021, DEF had over 4,400 MW of FERC jurisdictional solar projects in the DEF grid interconnection queue, representing over 60 active projects and 13 of those projects included DEF as the noted developer. DEF anticipates that additional projects developed by DEF as well as third parties will be added through the decade. Some of those third-party projects anticipate selling to utilities other than DEF, therefore, DEF is reasonably projecting over 3,400 MW of solar PV projects to be installed in the DEF territory over that period. However, DEF continues to study and refine this projection. Project ownership proportions may change over time based on specific project economics, development details, renewable energy incentives and other factors.

DEF continues to field inquiries from potential renewable suppliers and explore whether these potential QFs can provide project commitments and reliable capacity or energy consistent with FERC Rules and the FPSC Rules, 25-17.080 through 25-17.310. DEF will continue to submit renewable contracts in compliance with all policies as appropriate.

Depending upon the mix of generators operating at any given time, the purchase of renewable energy may reduce DEF's use of fossil fuels. Renewable energy sources making firm commitments to the company can also defer or eliminate the need to construct more conventional generators. As part of DEF's integrated resource planning process, we are continually evaluating cost-effective alternatives to meet our customer's needs. DEF knows that renewable and distributed energy resources are an important part of Florida's energy future and we are committed to advancing these resources in an affordable and sustainable way. We are encouraged to see solar PV technology continue to reduce in price. As a result of the forecasts around solar PV technology, DEF has incorporated this clean energy source as an increasing supply-side resource in both DEF's near-term and long-term generation plans.

The development, construction, commissioning and initial operation of the solar projects at Perry, Osceola, Suwannee, Hamilton, Lake Placid, Trenton, DeBary, Columbia, the now commercial Twin Rivers, Santa Fe, and Duette plants and under construction Bay Trail, Sandy Creek, Fort Green, and Charlie Creek have provided DEF with valuable experience in siting, community engagement, contracting, constructing, operating, and integrating solar photovoltaic technology facilities on the power grid. DEF has worked with our communities on renewable and solar energy technology education, and our contractors to establish necessary standards for the construction and upkeep of utility grade facilities and to develop standards necessary to ensure the reliability of local distribution systems. DEF is integrating voltage control in the transmission connected solar projects to enhance operational reliability and local transmission resiliency. In addition, DEF is incorporating the ability to place the solar facilities on Automatic Generation Control (AGC). This capability is preparing DEF for future scenarios where there is an excess of generation on the system and a need to utilize the solar resources to balance generation with demand. DEF is utilizing its operational experience and historic data from these solar resources to optimize the daily economic system dispatch, to quantify additional system flexibility needs to counteract the variability of solar generation and investigate potential fuel diversity contributions. Adding these near-term solar facilities is a natural evolution of integrating new generation technology and supplements the solar PV research and demonstration pilots. The arrays for the solar plants that went in-service in 2021, Santa Fe, Twin Rivers, and Duette, are shown in Figures 3.2, 3.3 and 3.4 below.

FIGURE 3.2
Santa Fe Solar Power Plant

FIGURE 3.3
Twin Rivers Solar Power Plant

FIGURE 3.4
Duette Solar Power Plant

DEF's current forecast, supporting the Base Expansion Plan includes over 1,350 MW of DEF-owned solar PV to be under development over the next four years and approximately 3,100 MW over the ten-year planning horizon. As with all forecasts included here, the forecast relies heavily on the forward-looking price for this technology, the value rendered by this technology, and considerations to other emerging and conventional cost-effective alternatives, including the use of emerging battery storage technology.

BATTERY ENERGY STORAGE SYSTEMS

Trenton and Lake Placid battery energy storage systems from DEF's 50 MW battery storage pilot program (Battery Storage Pilot) were placed in-service in late 2021 with the remaining 4 battery energy storage systems under construction and expected to be placed in-service in 2022. These projects may serve a variety of purposes including, but not limited to substation upgrade deferral, distribution line reconducting deferral, power reliability improvement, frequency regulation, Volt/VAR support, backup power, energy capture, and peak load shaving. The projects, max power output, and guaranteed energy storage for a minimum of ten years are provided in Table 3.3. Figure 3.4 through 3.8 provide pictures of five of the battery energy storage projects. Going forward, DEF will use the data gathered from the operation of these Pilot Program sites to evaluate the opportunities and uses of future DEF battery development.

Table 3.3
DEF Battery Energy Storage Pilot Program Projects Summary

Name	Max Power Output (MW)	Guaranteed Energy Storage (MWh)
Cape San Blas	5.5	14.3
Trenton	11.0	10.1
Micanopy	8.25	11.7
Jennings	5.5	5.5
John Hopkins Middle School	2.475	18.0
Lake Placid	17.275	34.0

FIGURE 3.5
Trenton Battery Energy Storage System

FIGURE 3.6
Cape San Blas Battery Energy Storage System

FIGURE 3.7
Jennings Battery Energy Storage System

FIGURE 3.8
Micanopy Battery Energy Storage System

FIGURE 3.9
Lake Placid Battery Energy Storage System

TECHNOLOGY AND INNOVATION

Duke Energy continues to evaluate new technology and innovations for potential application both in and beyond the ten-year plan window. Technologies under evaluation, but not yet included in the base expansion plan may be commercially or economically unproven, but Duke and DEF are active in investigation and development of these technologies. At the Duke enterprise level, engineers and specialists are involved in cooperative work with vendors and industry groups on supply side technologies including wind generation, advanced battery development, hydrogen generation and combustion, and advanced nuclear. On the demand side, technologies including advanced demand response technologies such as commercial building pre-cooling, two-way water heater control, and smart appliance applications are being explored and evaluated. In addition, the company continues to explore intersections of grid and system operations with alternative generating technologies including distributed solar and storage and microgrid applications.

PLAN CONSIDERATIONS

Load Forecast

In general, higher-than-projected load growth would shift the need for new capacity to an earlier year and lower-than-projected load growth would delay the need for new resources. The

Company's resource plan provides the flexibility to shift certain resources to earlier or later in-service dates should a significant change in projected customer demand begin to materialize. A specific discussion of DEF's review of load growth forecasts higher and lower than the base forecast can be found in the previous sections.

TRANSMISSION PLANNING

DEF's transmission planning assessment practices are developed to test the ability of the planned system to meet the reliability criteria as outlined in the FERC Form No. 715 filing, and to assure the system meets DEF, Florida Reliability Coordinating Council, Inc. (FRCC), and North American Electric Reliability Corporation (NERC) criteria. This involves the use of load flow and transient stability programs to model various contingency situations that may occur, and in determining if the system response meets the reliability criteria. In general, this involves running simulations for the loss of any single line, generator, or transformer. DEF runs this analysis for contingencies that may occur at system peak and off-peak load levels, under both summer and winter conditions. Additional studies are performed to determine the system response to credible, but less probable criteria. These studies include the loss of multiple generators, transmission lines, or combinations of each (some load loss is permissible under the more severe disturbances). These credible, but less probable scenarios are also evaluated at various load levels since some of the more severe situations occur at average or minimum load conditions. In particular, critical fault clearing times are typically the shortest (most severe) at minimum load conditions, with just a few large base load units supplying the system needs. As noted in the DEF reliability criteria, some remedial actions are allowed to reduce system loadings; in particular, sectionalizing is allowed to reduce loading on lower voltage lines for bulk system contingencies, but the risk to load on the sectionalized system must be reasonable (it would not be considered prudent to operate for long periods with a sectionalized system). In addition, the number of remedial action steps and the overall complexity of the scheme are evaluated to determine overall acceptability.

DEF presently uses the following reference documents to calculate and manage Available Transfer Capability (ATC), Total Transfer Capability (TTC) and Transmission Reliability Margin (TRM) for required transmission path postings on the Florida Open Access Same Time Information System (OASIS):

- http://www.oatioasis.com/FPC/FPCdocs/ATCID_Posted_Rev4.docx
- http://www.oatioasis.com/FPC/FPCdocs/TRMID_4.docx

DEF uses the following reference document to calculate and manage Capacity Benefit Margin (CBM):

- http://www.oatioasis.com/FPC/FPCdocs/CBMID_rev3.docx

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CHAPTER 4

ENVIRONMENTAL AND LAND USE INFORMATION

CHAPTER 4

ENVIRONMENTAL AND LAND USE INFORMATION

PREFERRED SITES

DEF's 2022 TYSP Preferred Sites include eight solar generations sites: the Bay Trail Solar Site, the Sandy Creek Solar Site, the Fort Green Solar Site, the Charlie Creek Solar Site, the Bay Ranch Solar Site, the Hildreth Solar Site, the Hardeetown Solar Site and the High Springs Solar Site. These Preferred Sites are discussed below.

BAY TRAIL SOLAR SITE

DEF has identified the Bay Trail Solar Project, a 74.9 MWac solar single-axis tracking PV project located in Citrus County, Florida. The site is located on limestone mining lands and is relatively flat with minimal sloping that will allow for the use of a tracking system. The point of interconnection will be a new line position on the 230 kV bus of the existing DEF Citrus Combined Cycle Substation and will be connected via a generation tie-line. All environmental surveys are complete, and DEF has received the necessary permit approvals from Citrus County including its Environmental Resource Permit from the Florida Department of Environmental Protection (FDEP). The project obtained a Gopher Tortoises Relocation Permit and has had minimal impacts to wetlands or additional species. The project started construction in March 2021 and is expected to be in-service in the spring of 2022.

FIGURE 4.1

Bay Trail Solar Project

SANDY CREEK SOLAR SITE

DEF has identified the Sandy Creek Solar Project, a 74.9 MWac solar single-axis tracking PV project located in Bay County, Florida. The site is located on former cattle grazing and timber lands and is relatively flat with minimal sloping that will allow for the use of a tracking system. The point of interconnection will be a new 230 kV three terminal, three breaker switching station and will be connected via a short generation tie-line. All environmental surveys are complete, and DEF has received the necessary conditional permits from Bay County including a Development Order approval from Bay County. The project obtained a Gopher Tortoises Relocation Permit and has had minimal impacts to wetlands or additional species. DEF applied for the Environmental Resource Permit from FDEP and received it in early 2021. The project started construction in the summer of 2021 with an expected in-service date during the spring of 2022.

FIGURE 4.2

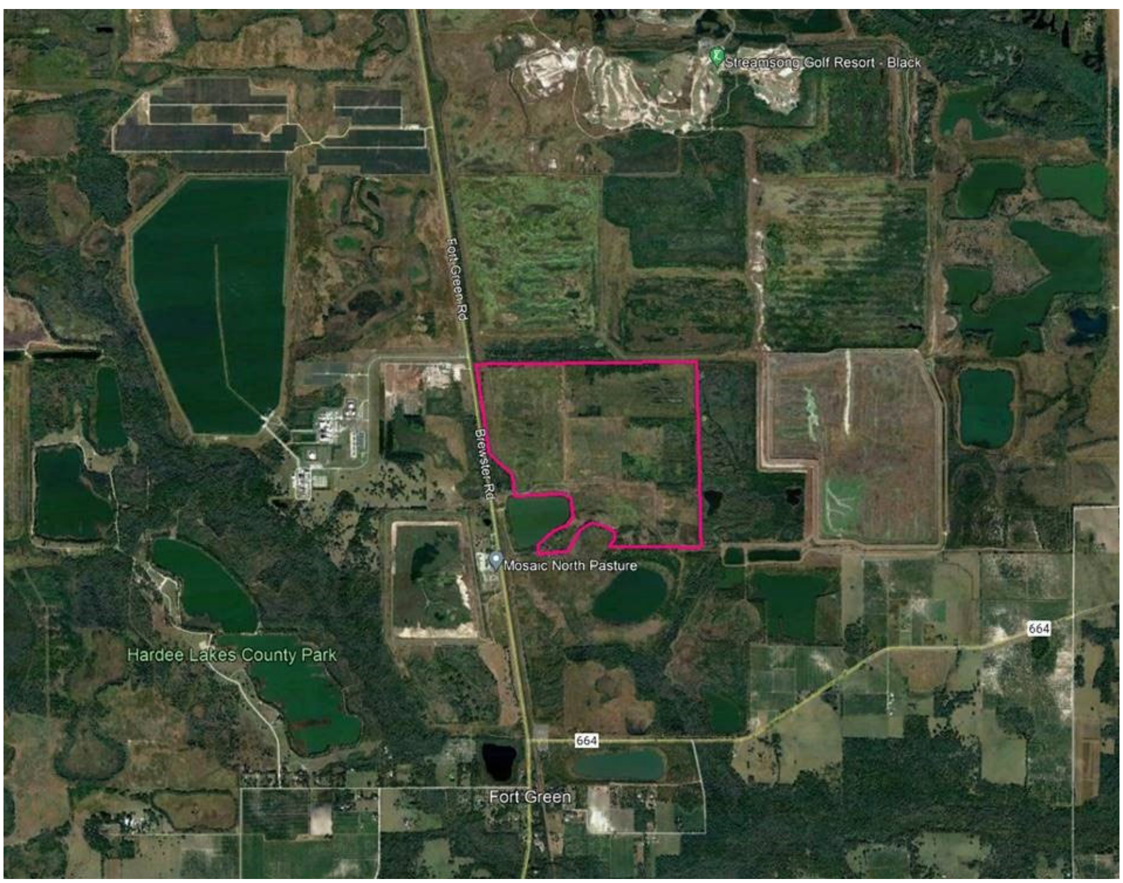
Sandy Creek Solar Project

FORT GREEN SOLAR SITE

DEF has identified the Fort Green Solar Project, a 74.9 MWac fixed tracking PV project located in Hardee County, Florida. The site is located on reclaimed phosphate mining land and is relatively flat with minimal sloping. The point of interconnection will be a new 69 kV breaker terminal at the existing Fort Green Springs substation. The project generation step-up transformer will be located approximately one mile south of the project site, connected via a generation tie-line. All environmental surveys are complete. A Site Development and Site Construction Plan approval are required from Hardee County along with an Environmental Resource Permit from FDEP. The project obtained a Gopher Tortoises Relocation Permit and has had minimal impacts to wetlands or additional species. The project started construction in the summer of 2021 and has an expected in-service date during the Summer of 2022.

FIGURE 4.3

Fort Green Solar Project

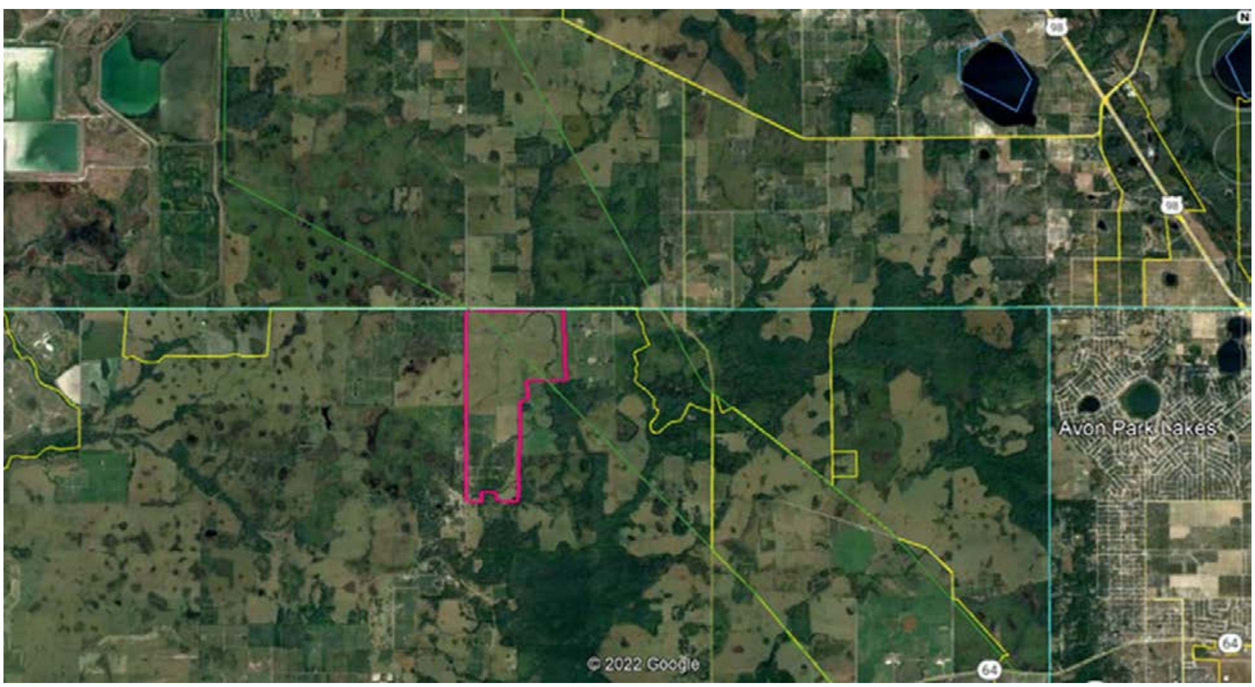


CHARLIE CREEK SOLAR SITE

DEF has identified the Charlie Creek Solar Project, a 74.9 MWac solar single-axis tracking PV project located in Hardee County, Florida. The site is located on former cattle grazing land and citrus groves and is relatively flat with minimal sloping that will allow for the use of a tracking system. The point of interconnection will be a new 230 kV three terminal, three breaker switching station and will be connected via a generation tie-line. All environmental surveys are complete, and DEF has received the necessary permits approvals from Hardee County. DEF has applied for the Environmental Resource Permit from FDEP and received it at the beginning of 2021. The project obtained a Take Permit for the limited number of Burrowing Owls on site and has had minimal impacts to wetlands or additional species. The project started construction in May 2021 and is expected to achieve in-service date during the Summer of 2022.

FIGURE 4.4

Charlie Creek Solar Project



BAY RANCH SOLAR SITE

DEF has identified the Bay Ranch Solar Project, a 74.9 MWac solar single-axis tracking PV project located in Bay County, Florida. The site is located on former cattle grazing and timber lands and is relatively flat with minimal sloping that will allow for the use of a tracking system. The point of interconnection will be a new 230 kV three terminal, three breaker switching station and will be connected via a short generation tie-line. All environmental surveys are complete, and DEF has received the necessary conditional permits from Bay County. A Development Order approval is required from Bay County along with an Environmental Resource Permit from FDEP. The project expects to find a limited number of Gopher Tortoises and have minimal impacts to wetlands or additional species. DEF has applied for the Environmental Resource Permit from FDEP and expects its approval in early 2022. The project is expected to start construction in the spring of 2022 with an expected in-service date of early 2023.

FIGURE 4.5

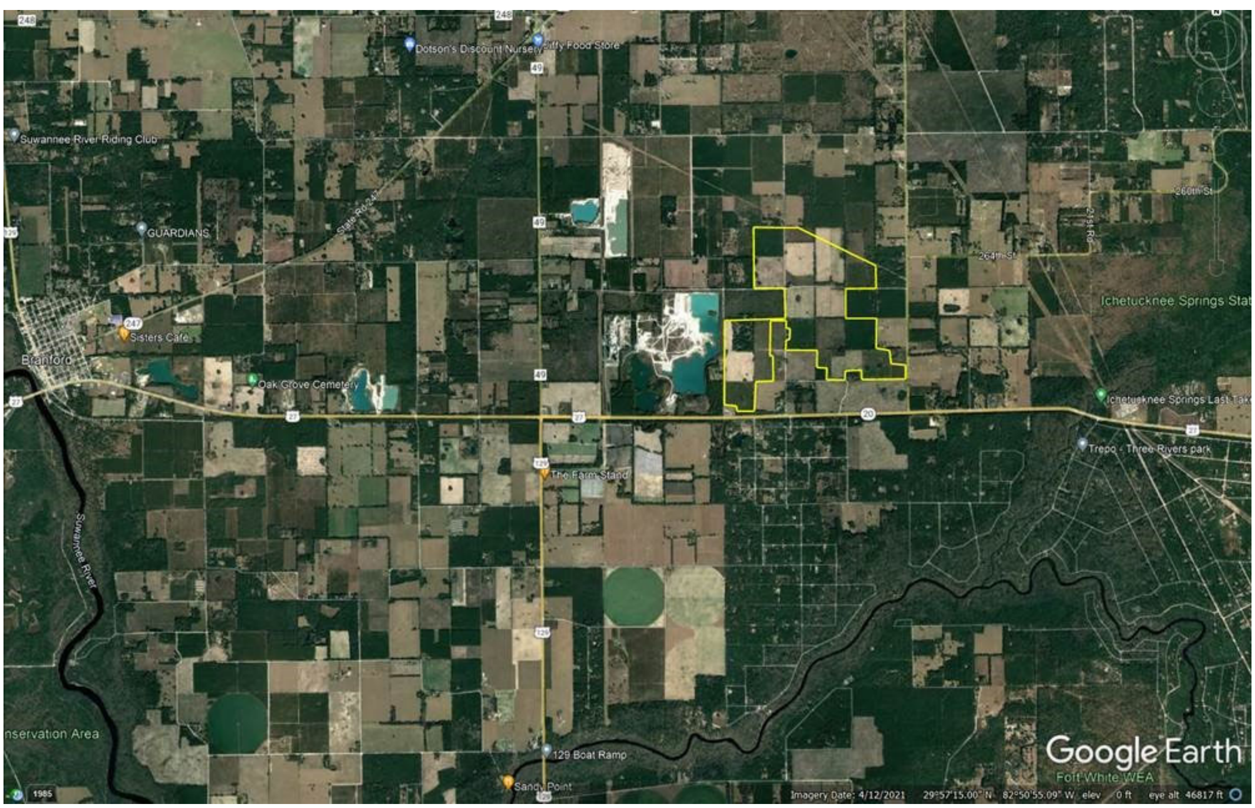
Bay Ranch Solar Project

HILDRETH SOLAR SITE

DEF has identified the Hildreth Solar Project, a 74.9 MWac solar single-axis tracking PV project located in Suwannee County, Florida. The site is located on former cattle grazing, farmlands and timber lands and is relatively flat with minimal sloping that will allow for the use of a tracking system. The point of interconnection will be a new 69 kV three terminal, three breaker switching station and will be connected via a short generation tie-line. All environmental surveys are complete, and DEF has received the necessary special permits from Suwannee County. A Site and Development Plan approval is required from Suwannee County along with an Environmental Resource Permit from FDEP. The project expects to find a moderate number of Gopher Tortoises and have no impacts to wetlands. The project is expected to have minimal impacts to the American Kestrel and the Santa Fe Crayfish. DEF has applied for the Environmental Resource Permit from FDEP and expects its approval in early 2022. The project is expected to start construction in summer 2022 with an expected in-service date of early 2023.

FIGURE 4.6

Hildreth Solar Project

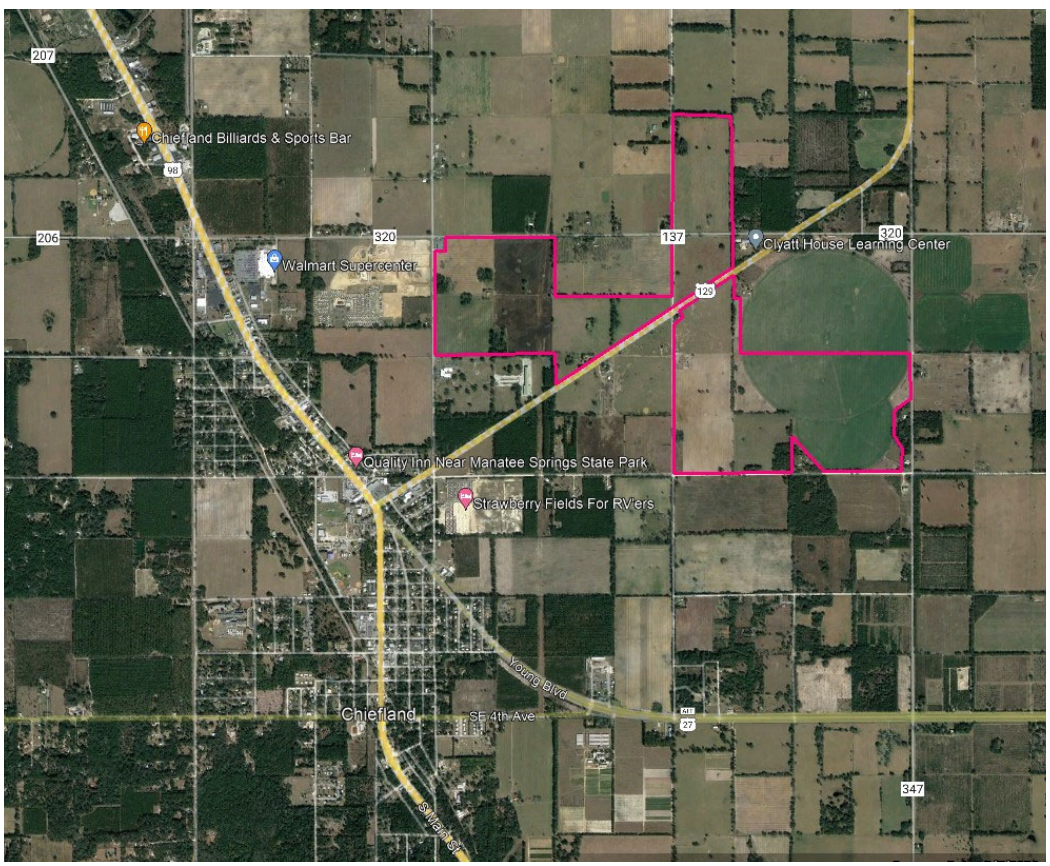


HARDEETOWN SOLAR SITE

DEF has identified the Hardeetown Solar Plant, a 74.9 MWac solar single-axis tracking PV project located in Levy County, Florida. The site is a former agricultural and cattle grazing lands and is relatively flat with minimal sloping that will allow for the use of a tracking system. The point of interconnection will be a new 69 kV three ring breaker at the existing 69 kV Chiefland Substation and will be connected via a generation tie-line. All environmental surveys are complete, and DEF has received the necessary conditional use permit from Levy County. A Site Construction Plan approval is required from Levy County along with an Environmental Resource Permit from FDEP. DEF has applied for the Environmental Resource Permit and expects to receive it early in spring 2022. There are no wetland impacts on site and no additional species of concern. The project is expected to start construction in the spring of 2022, with an expected in-service date of early 2023.

FIGURE 4.7

Hardeetown Solar Project

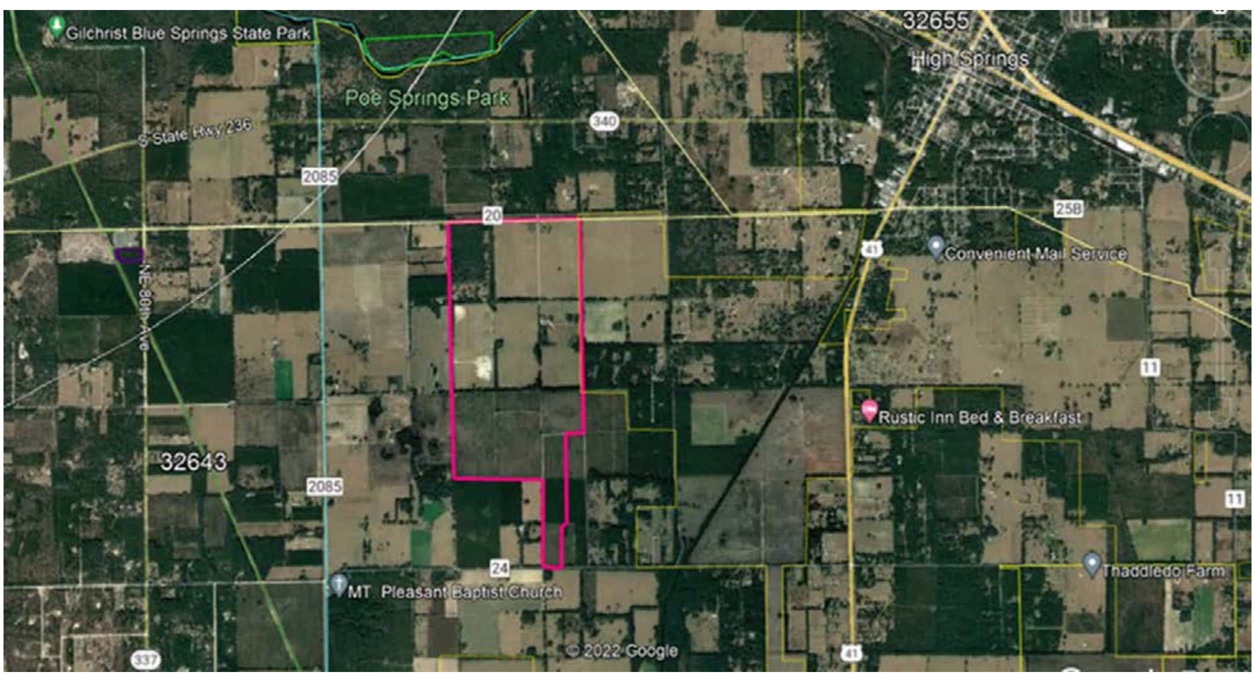


HIGH SPRINGS SOLAR SITE

DEF has identified the High Springs Solar Project, a 74.9 MWac solar single-axis tracking PV project located in Alachua County, Florida. The site is located on former cattle grazing and timber lands and is relatively flat with minimal sloping that will allow for the use of a tracking system. The point of interconnection will be a new line position on the 69 kV bus of the existing DEF Ginnie Substation and will be connected via a generation tie-line. All environmental surveys are complete, and DEF has received the necessary permits approvals from the City of High Springs. A Site and Development Plan approval is required from the Regional Planning Council along with an Environmental Resource Permit from FDEP. The Environmental Resource Permit application was submitted to FDEP in December 2021 and is expected late spring 2022. The project expects to find a moderate number Gopher Tortoises that will need to be relocated. There are no wetlands on the project site. The project expects to start construction in early summer with an expected in-service date of early 2023.

FIGURE 4.8

High Springs Solar Project



DUKE ENERGY FLORIDA

SCHEDULE 1
EXISTING GENERATING FACILITIES

AS OF DECEMBER 31, 2021

(1) PLANT NAME	(2) UNIT NO.	(3) LOCATION (COUNTY)	(4) UNIT TYPE	(5) FUEL PRI.	(6) FUEL ALT.	(7) FUEL TRANSPORT PRI.	(8) FUEL TRANSPORT ALT.	(9) ALT. FUEL DAYS USE	(10) COM'L IN-SERVICE MO./YEAR	(11) EXPECTED RETIREMENT MO./YEAR	(12) GEN. MAX. NAMEPLATE KW	(13) NET CAPABILITY SUMMER MW	(14) NET CAPABILITY WINTER MW
STEAM													
ANCLOTE	1	PASCO	ST	NG		PL			10/74		556,200	508	521
ANCLOTE	2	PASCO	ST	NG		PL			10/78		556,200	505	514
CRYSTAL RIVER	4	CITRUS	ST	BIT		WA	RR		12/82		739,260	712	721
CRYSTAL RIVER	5	CITRUS	ST	BIT		WA	RR		10/84		739,260	698	709
											Steam Total	**2,423**	**2,465**
COMBINED-CYCLE													
P L BARTOW	4	PINELLAS	CC	NG	DFO	PL	TK	*	6/09		1,254,200	1,112	1,259
CITRUS COUNTY COMBINED CYCLE	PB1	CITRUS	CC	NG		PL			10/18		985,150	807	941
CITRUS COUNTY COMBINED CYCLE	PB2	CITRUS	CC	NG		PL			11/18		985,150	803	943
HINES ENERGY COMPLEX	1	POLK	CC	NG		PL			4/99		546,500	490	521
HINES ENERGY COMPLEX	2	POLK	CC	NG	DFO	PL	TK	*	12/03		548,250	532	549
HINES ENERGY COMPLEX	3	POLK	CC	NG	DFO	PL	TK	*	11/05		561,000	523	555
HINES ENERGY COMPLEX	4	POLK	CC	NG	DFO	PL	TK	*	12/07		610,500	516	544
OSPREY ENERGY CENTER POWER PLANT	1	POLK	CC	NG		PL			5/04		644,300	245	245
TIGER BAY	1	POLK	CC	NG		PL			8/97		278,100	193	224
											CC Total	**5,221**	**5,781**
COMBUSTION TURBINE													
BARTOW	P1	PINELLAS	CT	DFO		WA		*	5/72	6/2027 **	55,400	41	48
BARTOW	P2	PINELLAS	CT	NG	DFO	PL	WA	*	6/72		55,400	41	50
BARTOW	P3	PINELLAS	CT	DFO		WA		*	6/72	6/2027 **	55,400	41	53
BARTOW	P4	PINELLAS	CT	NG	DFO	PL	WA	*	6/72		55,400	45	58
BAYBORO	P1	PINELLAS	CT	DFO		WA		*	4/73	12/2025 **	56,700	44	58
BAYBORO	P2	PINELLAS	CT	DFO		WA		*	4/73	12/2025 **	56,700	41	55
BAYBORO	P3	PINELLAS	CT	DFO		WA		*	4/73	12/2025 **	56,700	43	57
BAYBORO	P4	PINELLAS	CT	DFO		WA		*	4/73	12/2025 **	56,700	43	56
DEBARY	P2	VOLUSIA	CT	DFO		TK		*	12/75-4/76	6/2027 **	73,440	45	57
DEBARY	P3	VOLUSIA	CT	DFO		TK		*	12/75-4/76	6/2027 **	73,440	45	59
DEBARY	P4	VOLUSIA	CT	DFO		TK		*	12/75-4/76	6/2027 **	73,440	46	59
DEBARY	P5	VOLUSIA	CT	DFO		TK		*	12/75-4/76	6/2027 **	73,440	45	58
DEBARY	P6	VOLUSIA	CT	DFO		TK		*	12/75-4/76	6/2027 **	73,440	46	59
DEBARY	P7	VOLUSIA	CT	NG	DFO	PL	TK	*	10/92		103,500	74	93
DEBARY	P8	VOLUSIA	CT	NG	DFO	PL	TK	*	10/92		103,500	75	94
DEBARY	P9	VOLUSIA	CT	NG	DFO	PL	TK	*	10/92		103,500	76	94
DEBARY	P10	VOLUSIA	CT	DFO		TK		*	10/92		103,500	72	88
INTERCESSION CITY	P1	OSCEOLA	CT	DFO		PL,TK		*	5/74		56,700	45	61
INTERCESSION CITY	P2	OSCEOLA	CT	DFO		PL,TK		*	5/74		56,700	46	60
INTERCESSION CITY	P3	OSCEOLA	CT	DFO		PL,TK		*	5/74		56,700	46	61
INTERCESSION CITY	P4	OSCEOLA	CT	DFO		PL,TK		*	5/74		56,700	46	62
INTERCESSION CITY	P5	OSCEOLA	CT	DFO		PL,TK		*	5/74		56,700	45	59
INTERCESSION CITY	P6	OSCEOLA	CT	DFO		PL,TK		*	5/74		56,700	47	60
INTERCESSION CITY	P7	OSCEOLA	CT	NG	DFO	PL	PL,TK	*	10/93		103,500	78	95
INTERCESSION CITY	P8	OSCEOLA	CT	NG	DFO	PL	PL,TK	*	10/93		103,500	77	95
INTERCESSION CITY	P9	OSCEOLA	CT	NG	DFO	PL	PL,TK	*	10/93		103,500	77	95
INTERCESSION CITY	P10	OSCEOLA	CT	NG	DFO	PL	PL,TK	*	10/93		103,500	74	94
INTERCESSION CITY	P11	OSCEOLA	CT	DFO		PL,TK		*	1/97		148,500	140	161
INTERCESSION CITY	P12	OSCEOLA	CT	NG	DFO	PL	PL,TK	*	12/00		98,260	69	89
INTERCESSION CITY	P13	OSCEOLA	CT	NG	DFO	PL	PL,TK	*	12/00		98,260	71	91
INTERCESSION CITY	P14	OSCEOLA	CT	NG	DFO	PL	PL,TK	*	12/00		98,260	70	90
SUWANNEE RIVER	P1	SUWANNEE	CT	NG	DFO	PL	TK	*	10/80		65,999	48	65
SUWANNEE RIVER	P2	SUWANNEE	CT	DFO		TK		*	10/80		65,999	48	64
SUWANNEE RIVER	P3	SUWANNEE	CT	NG	DFO	PL	TK	*	11/80		65,999	49	65
UNIVERSITY OF FLORIDA	P1	ALACHUA	GT	NG		PL			1/94	11/2027 **	43,000	44	50
											CT Total	**1,983**	**2,513**
SOLAR													
OSCEOLA SOLAR FACILITY	PV1	OSCEOLA	PV	SO					5/16		3,800	2	0
PERRY SOLAR FACILITY	PV1	TAYLOR	PV	SO					8/16		5,100	2	0
SUWANNEE RIVER SOLAR FACILITY	PV1	SUWANNEE	PV	SO					11/17		8,800	4	0
HAMILTON SOLAR POWER PLANT	PV1	HAMILTON	PV	SO					12/18		74,900	42	0
TRENTON SOLAR POWER PLANT	PV1	GILCHRIST	PV	SO					12/19		74,900	42	0
LAKE PLACID SOLAR POWER PLANT	PV1	HIGHLANDS	PV	SO					12/19		45,000	25	0
ST PETERSBURG PIER	PV1	PINELLAS	PV	SO					12/19		350	0	0
COLUMBIA SOLAR POWER PLANT	PV1	COLUMBIA	PV	SO					3/20		74,900	42	0
DEBARY SOLAR POWER PLANT	PV1	VOLUSIA	PV	SO					5/20		74,500	33	0
SANTA FE SOLAR POWER PLANT	PV1	COLUMBIA	PV	SO					3/21		74,900	43	0
TWIN RIVERS SOLAR POWER PLANT	PV1	HAMILTON	PV	SO					3/21		74,900	43	0
DUETTE SOLAR POWER PLANT	PV1	MANATEE	PV	SO					10/21		74,500	42	0
											SOLAR Total	**321**	**-**
											TOTAL RESOURCES (MW)	**9,948**	**10,759**

* APPROXIMATELY 2 TO 3 DAYS OF OIL USE TYPICALLY TARGETED FOR ENTIRE PLANT.
** DATES FOR RETIREMENT ARE APPROXIMATE AND SUBJECT TO CHANGE

DUKE ENERGY FLORIDA

SCHEDULE 2.1.1
HISTORY AND FORECAST OF ENERGY CONSUMPTION AND
NUMBER OF CUSTOMERS BY CUSTOMER CLASS
BASE CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	RURAL AND RESIDENTIAL					COMMERCIAL		
YEAR	DEF POPULATION	MEMBERS PER HOUSEHOLD	GWh	AVERAGE NO. OF CUSTOMERS	AVERAGE KWh CONSUMPTION PER CUSTOMER	GWh	AVERAGE NO. OF CUSTOMERS	AVERAGE KWh CONSUMPTION PER CUSTOMER
HISTORY:								
2012	3,641,179	2.496	18,251	1,458,690	12,512	11,723	163,297	71,792
2013	3,713,013	2.495	18,508	1,488,159	12,437	11,718	165,936	70,617
2014	3,747,160	2.492	19,003	1,503,758	12,637	11,789	167,253	70,485
2015	3,794,138	2.489	19,932	1,524,605	13,074	12,070	169,147	71,359

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SCHEDULE 2.2.1
HISTORY AND FORECAST OF ENERGY CONSUMPTION AND
NUMBER OF CUSTOMERS BY CUSTOMER CLASS
BASE CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	INDUSTRIAL						
YEAR	GWh	AVERAGE NO. OF CUSTOMERS	AVERAGE KWh CONSUMPTION PER CUSTOMER	RAILROADS AND RAILWAYS GWh	STREET & HIGHWAY LIGHTING GWh	OTHER SALES TO PUBLIC AUTHORITIES GWh	TOTAL SALES TO ULTIMATE CONSUMERS GWh
HISTORY:							
2012	3,160	2,372	1,332,209	0	25	3,221	36,381
2013	3,206	2,343	1,368,331	0	25	3,159	36,616
2014	3,267	2,280	1,432,895	0	25	3,157	37,240
2015	3,293	2,243	1,468,123	0	24	3,234	38,553
2016	3,197	2,178	1,467,860	0	24	3,194	38,774
2017	3,120	2,137	1,459,991	0	24	3,171	38,023

DUKE ENERGY FLORIDA

SCHEDULE 2.3.1
HISTORY AND FORECAST OF ENERGY CONSUMPTION AND
NUMBER OF CUSTOMERS BY CUSTOMER CLASS
BASE CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)
YEAR	SALES FOR RESALE GWh	UTILITY USE & LOSSES GWh	NET ENERGY FOR LOAD GWh	OTHER CUSTOMERS (AVERAGE NO.)	TOTAL NO. OF CUSTOMERS
HISTORY:					
2012	1,768	3,065	41,214	25,480	1,649,839
2013	1,488	2,668	40,772	25,759	1,682,197
2014	1,333	2,402	40,975	25,800	1,699,091
2015	1,243	2,484	42,280	25,866	1,721,861
2016	1,803	2,277	42,854	26,005	1,743,149
2017	2,196	2,700	42,919	26,248	1,775,340
2018	2,304	2,776	44,224	26,504	1,801,564

DUKE ENERGY FLORIDA

SCHEDULE 3.1.1

HISTORY AND FORECAST OF SUMMER PEAK DEMAND (MW)

BASE CASE FORECAST

(1) YEAR	(2) TOTAL	(3) WHOLESALE	(4) RETAIL	(5) INTERRUPTIBLE	(6) RESIDENTIAL LOAD MANAGEMENT	(7) RESIDENTIAL CONSERVATION	(8) COMM. / IND. LOAD MANAGEMENT	(9) COMM. / IND. CONSERVATION	(OTH) OTHER DEMAND REDUCTIONS	(10) NET FIRM DEMAND
HISTORY:										
2012	9,788	1080	8,708	262	328	358	98	280	124	8,337
2013	9,581	581	9,000	317	341	382	101	298	124	8,017
2014	10,067	814	9,253	232	355	404	108	313	132	8,523
2015	10,058	772	9,286	303	360	435	124	324	80	8,431
2016	10,530	893	9,637	235	366	466	100	339	80	8,946
2017	10,220	808	9,412	203	342	498	95	349	80	8,653
2018	10,271	812	9,459	257	386	532	83	387	80	8,545
2019	11,029	1021	10,008	230	394	566	86	414	80	9,260
2020	10,765	901	9,864	250	393	599	83	440	80	8,921
2021	10,835	1,010	9,825	375	394	623	85	451	80	8,826
FORECAST:										
2022	10,832	904	9,928	346	395	650	88	453	80	8,821
2023	10,628	661	9,967	347	396	676	91	455	80	8,583
2024	10,725	661	10,063	346	397	702	95	457	80	8,648
2025	10,578	461	10,117	341	398	726	98	460	80	8,475
2026	10,655	461	10,194	341	399	749	101	462	80	8,523
2027	10,744	461	10,282	341	400	772	104	464	80	8,582
2028	10,856	461	10,395	341	401	794	107	466	80	8,667
2029	10,951	461	10,490	341	402	815	111	469	80	8,733
2030	11,043	461	10,582	341	403	835	114	471	80	8,798
2031	11,091	411	10,681	302	404	855	117	473	80	8,861

Historical Values (2012 - 2021):

Col. (2) = recorded peak + implemented load control + residential and commercial/industrial conservation and customer-owned self-service cogeneration.

Cols. (5) - (9) = Represent total cumulative capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) =Customer-owned self-service cogeneration.

Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

Projected Values (2022 - 2031):

Cols. (2) - (4) = forecasted peak without load control, cumulative conservation, and customer-owned self-service cogeneration.

Cols. (5) - (9) = cumulative conservation and load control capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) = customer-owned self-service cogeneration.

Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

DUKE ENERGY FLORIDA

SCHEDULE 3.1.2
HISTORY AND FORECAST OF SUMMER PEAK DEMAND (MW)
HIGH CASE FORECAST

(1) YEAR	(2) TOTAL	(3) WHOLESALE	(4) RETAIL	(5) INTERRUPTIBLE	(6) RESIDENTIAL LOAD MANAGEMENT	(7) RESIDENTIAL CONSERVATION	(8) COMM. / IND. LOAD MANAGEMENT	(9) COMM. / IND. CONSERVATION	(OTH) OTHER DEMAND REDUCTIONS	(10) NET FIRM DEMAND
HISTORY:										
2012	9,788	1,080	8,708	262	328	358	98	280	124	8,337
2013	9,581	581	9,000	317	341	382	101	298	124	8,017
2014	10,067	814	9,253	232	355	404	108	313	132	8,523
2015	10,058	772	9,286	303	360	435	124	324	80	8,431
2016	10,530	893	9,637	235	366	466	100	339	80	8,946
2017	10,220	808	9,412	203	342	498	95	349	80	8,653
2018	10,271	812	9,459	257	386	532	83	387	80	8,545
2019	11,029	1,021	10,008	230	394	566	86	414	80	9,260
2020	10,765	901	9,864	250	393	599	83	440	80	8,921
2021	10,835	1,010	9,825	375	394	623	85	451	80	8,826
FORECAST:										
2022	10,924	904	10,020	346	395	650	88	453	80	8,913
2023	10,745	661	10,083	347	396	676	91	455	80	8,700
2024	10,834	661	10,172	346	397	702	95	457	80	8,757
2025	10,695	461	10,234	341	398	726	98	460	80	8,592
2026	10,783	461	10,322	341	399	749	101	462	80	8,651
2027	10,874	461	10,413	341	400	772	104	464	80	8,713
2028	10,987	461	10,526	341	401	794	107	466	80	8,797
2029	11,086	461	10,625	341	402	815	111	469	80	8,868
2030	11,183	461	10,722	341	403	835	114	471	80	8,939
2031	11,241	411	10,830	302	404	855	117	473	80	9,011

Historical Values (2012 - 2021):
Col. (2) = recorded peak + implemented load control + residential and commercial/industrial conservation and customer-owned self-service cogeneration.
Cols. (5) - (9) = Represent total cumulative capabilities at peak. Col. (8) includes commercial load management and standby generation.
Col. (OTH) =Customer-owned self-service cogeneration.
Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).
Projected Values (2022 - 2031):
Cols. (2) - (4) = forecasted peak without load control, cumulative conservation, and customer-owned self-service cogeneration.
Cols. (5) - (9) = cumulative conservation and load control capabilities at peak. Col. (8) includes commercial load management and standby generation.
Col. (OTH) = customer-owned self-service cogeneration.
Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

DUKE ENERGY FLORIDA

SCHEDULE 3.1.3
HISTORY AND FORECAST OF SUMMER PEAK DEMAND (MW)
LOW CASE FORECAST

(1) YEAR	(2) TOTAL	(3) WHOLESALE	(4) RETAIL	(5) INTERRUPTIBLE	(6) RESIDENTIAL LOAD MANAGEMENT	(7) RESIDENTIAL CONSERVATION	(8) COMM. / IND. LOAD MANAGEMENT	(9) COMM. / IND. CONSERVATION	(OTH) OTHER DEMAND REDUCTIONS	(10) NET FIRM DEMAND
HISTORY:										
2012	9,788	1,080	8,708	262	328	358	98	280	124	8,337
2013	9,581	581	9,000	317	341	382	101	298	124	8,017
2014	10,067	814	9,253	232	355	404	108	313	132	8,523
2015	10,058	772	9,286	303	360	435	124	324	80	8,431
2016	10,530	893	9,637	235	366	466	100	339	80	8,946
2017	10,220	808	9,412	203	342	498	95	349	80	8,653
2018	10,271	812	9,459	257	386	532	83	387	80	8,545
2019	11,029	1,021	10,008	230	394	566	86	414	80	9,260
2020	10,765	901	9,864	250	393	599	83	440	80	8,921
2021	10,835	1,010	9,825	375	394	623	85	451	80	8,826
FORECAST:										
2022	9,841	904	8,937	346	395	650	88	453	80	7,829
2023	9,601	661	8,940	347	396	676	91	455	80	7,556
2024	9,645	661	8,983	346	397	702	95	457	80	7,568
2025	9,459	461	8,997	341	398	726	98	460	80	7,356
2026	9,509	461	9,048	341	399	749	101	462	80	7,377
2027	9,570	461	9,109	341	400	772	104	464	80	7,409
2028	9,648	461	9,187	341	401	794	107	466	80	7,458
2029	9,719	461	9,258	341	402	815	111	469	80	7,501
2030	9,785	461	9,324	341	403	835	114	471	80	7,541
2031	9,805	411	9,394	302	404	855	117	473	80	7,575

Historical Values (2012 - 2021):
Col. (2) = recorded peak + implemented load control + residential and commercial/industrial conservation and customer-owned self-service cogeneration.
Cols. (5) - (9) = Represent total cumulative capabilities at peak. Col. (8) includes commercial load management and standby generation.
Col. (OTH) =Customer-owned self-service cogeneration.
Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).
Projected Values (2022 - 2031):
Cols. (2) - (4) = forecasted peak without load control, cumulative conservation, and customer-owned self-service cogeneration.
Cols. (5) - (9) = cumulative conservation and load control capabilities at peak. Col. (8) includes commercial load management and standby generation.
Col. (OTH) = customer-owned self-service cogeneration.
Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

DUKE ENERGY FLORIDA

SCHEDULE 3.2.1
HISTORY AND FORECAST OF WINTER PEAK DEMAND (MW)
BASE CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(OTH)	(10)
YEAR	TOTAL	WHOLESALE	RETAIL	INTERRUPTIBLE	RESIDENTIAL LOAD MANAGEMENT	RESIDENTIAL CONSERVATION	COMM. / IND. LOAD MANAGEMENT	COMM. / IND. CONSERVATION	OTHER DEMAND REDUCTIONS	NET FIRM DEMAND
HISTORY:										
2011/12	9,721	905	8,816	186	643	686	96	203	206	7,701
2012/13	9,109	831	8,278	287	652	747	97	220	213	6,893
2013/14	9,467	658	8,809	257	654	785	101	229	219	7,222
2014/15	10,648	1035	9,613	273	658	815	109	236	237	8,319
2015/16	9,678	1275	8,403	207	675	845	131	240	170	7,409
2016/17	8,739	701	8,038	191	695	878	79	243	165	6,489
2017/18	11,559	1071	10,488	244	699	913	79	246	196	9,182
2018/19	8,527	572	7,955	239	711	948	82	251	164	6,132
2019/20	9,725	613	9,112	292	670	982	80	256	177	7,268
2020/21	9,654	679	8,975	319	671	1,006	82	260	175	7,141
FORECAST:										
2021/22	11,314	1,049	10,265	323	672	1,033	84	263	191	8,748
2022/23	11,594	1,264	10,330	324	673	1,060	88	266	191	8,993
2023/24	11,695	1,264	10,431	323	674	1,086	91	268	192	9,061
2024/25	11,543	1,063	10,480	319	675	1,110	94	271	192	8,882
2025/26	11,621	1,063	10,557	319	676	1,133	97	274	193	8,929
2026/27	11,710	1,063	10,647	319	677	1,155	100	277	194	8,988
2027/28	11,225	462	10,763	319	678	1,177	103	280	195	8,472
2028/29	11,311	462	10,849	319	679	1,198	107	283	196	8,529
2029/30	11,391	462	10,929	319	680	1,219	110	285	197	8,582
2029/31	11,427	412	11,016	282	681	1,238	113	288	197	8,628

Historical Values (2012 - 2021):
Col. (2) = recorded peak + implemented load control + residential and commercial/industrial conservation and customer-owned self-service cogeneration.
Cols. (5) - (9) = Represent total cumulative capabilities at peak. Col. (8) includes commercial load management and standby generation.
Col. (OTH) = Voltage reduction and customer-owned self-service cogeneration.
Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).
Projected Values (2022 - 2031):
Cols. (2) - (4) = forecasted peak without load control, cumulative conservation, and customer-owned self-service cogeneration.
Cols. (5) - (9) = Represent cumulative conservation and load control capabilities at peak. Col. (8) includes commercial load management and standby generation.
Col. (OTH) = Voltage reduction and customer-owned self-service cogeneration.
Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

DUKE ENERGY FLORIDA

SCHEDULE 3.2.2
HISTORY AND FORECAST OF WINTER PEAK DEMAND (MW)
HIGH CASE FORECAST

(1) YEAR	(2) TOTAL	(3) WHOLESALE	(4) RETAIL	(5) INTERRUPTIBLE	(6) RESIDENTIAL LOAD MANAGEMENT	(7) RESIDENTIAL CONSERVATION	(8) COMM. / IND. LOAD MANAGEMENT	(9) COMM. / IND. CONSERVATION	(OTH) OTHER DEMAND REDUCTIONS	(10) NET FIRM DEMAND
HISTORY:										
2011/12	9,721	905	8,816	186	643	686	96	203	206	7,701
2012/13	9,109	831	8,278	287	652	747	97	220	213	6,893
2013/14	9,467	658	8,809	257	654	785	101	229	219	7,222
2014/15	10,648	1,035	9,613	273	658	815	109	236	237	8,319
2015/16	9,678	1,275	8,403	207	675	845	131	240	170	7,409
2016/17	8,739	701	8,038	191	695	878	79	243	165	6,489
2017/18	11,559	1,071	10,488	244	699	913	79	246	196	9,182
2018/19	8,527	572	7,955	239	711	948	82	251	164	6,132
2019/20	9,725	613	9,112	292	670	982	80	256	177	7,268
2020/21	9,654	679	8,975	319	671	1,006	82	260	175	7,141
FORECAST:										
2021/22	13,296	1,049	12,246	323	672	1,033	84	263	191	10,729
2022/23	13,612	1,264	12,348	324	673	1,060	88	266	191	11,011
2023/24	13,754	1,264	12,490	323	674	1,086	91	268	192	11,120
2024/25	13,641	1,063	12,578	319	675	1,110	94	271	192	10,980
2025/26	13,749	1,063	12,686	319	676	1,133	97	274	193	11,058
2026/27	13,861	1,063	12,798	319	677	1,155	100	277	194	11,139
2027/28	13,395	462	12,933	319	678	1,177	103	280	195	10,642
2028/29	13,507	462	13,045	319	679	1,198	107	283	196	10,725
2029/30	13,613	462	13,151	319	680	1,219	110	285	197	10,803
2030/31	13,678	412	13,266	282	681	1,238	113	288	197	10,878

Historical Values (2012 - 2021):
Col. (2) = recorded peak + implemented load control + residential and commercial/industrial conservation and customer-owned self-service cogeneration.
Cols. (5) - (9) = Represent total cumulative capabilities at peak. Col. (8) includes commercial load management and standby generation.
Col. (OTH) = Voltage reduction and customer-owned self-service cogeneration.
Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).
Projected Values (2022 - 2031):
Cols. (2) - (4) = forecasted peak without load control, cumulative conservation, and customer-owned self-service cogeneration.
Cols. (5) - (9) = Represent cumulative conservation and load control capabilities at peak. Col. (8) includes commercial load management and standby generation.
Col. (OTH) = Voltage reduction and customer-owned self-service cogeneration.
Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

DUKE ENERGY FLORIDA

SCHEDULE 3.2.3
HISTORY AND FORECAST OF WINTER PEAK DEMAND (MW)
LOW CASE FORECAST

(1) YEAR	(2) TOTAL	(3) WHOLESALE	(4) RETAIL	(5) INTERRUPTIBLE	(6) RESIDENTIAL LOAD MANAGEMENT	(7) RESIDENTIAL CONSERVATION	(8) COMM. / IND. LOAD MANAGEMENT	(9) COMM. / IND. CONSERVATION	(OTH) OTHER DEMAND REDUCTIONS	(10) NET FIRM DEMAND
HISTORY:										
2011/12	9,721	905	8,816	186	643	686	96	203	206	7,701
2012/13	9,109	831	8,278	287	652	747	97	220	213	6,893
2013/14	9,467	658	8,809	257	654	785	101	229	219	7,222
2014/15	10,648	1,035	9,613	273	658	815	109	236	237	8,319
2015/16	9,678	1,275	8,403	207	675	845	131	240	170	7,409
2016/17	8,739	701	8,038	191	695	878	79	243	165	6,489
2017/18	11,559	1,071	10,488	244	699	913	79	246	196	9,182
2018/19	8,527	572	7,955	239	711	948	82	251	164	6,132
2019/20	9,725	613	9,112	292	670	982	80	256	177	7,268
2020/21	9,654	679	8,975	319	671	1,006	82	260	175	7,141
FORECAST:										
2021/22	10,135	1,049	9,086	323	672	1,033	84	263	191	7,569
2022/23	10,316	1,264	9,052	324	673	1,060	88	266	191	7,715
2023/24	10,361	1,264	9,097	323	674	1,086	91	268	192	7,727
2024/25	10,169	1,063	9,106	319	675	1,110	94	271	192	7,508
2025/26	10,213	1,063	9,150	319	676	1,133	97	274	193	7,521
2026/27	10,272	1,063	9,209	319	677	1,155	100	277	194	7,550
2027/28	9,754	462	9,292	319	678	1,177	103	280	195	7,002
2028/29	9,820	462	9,358	319	679	1,198	107	283	196	7,038
2029/30	9,878	462	9,416	319	680	1,219	110	285	197	7,069
2030/31	9,888	412	9,476	282	681	1,238	113	288	197	7,088

Historical Values (2012 - 2021):
Col. (2) = recorded peak + implemented load control + residential and commercial/industrial conservation and customer-owned self-service cogeneration.
Cols. (5) - (9) = Represent total cumulative capabilities at peak. Col. (8) includes commercial load management and standby generation.
Col. (OTH) = Voltage reduction and customer-owned self-service cogeneration.
Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).
Projected Values (2022 - 2031):
Cols. (2) - (4) = forecasted peak without load control, cumulative conservation, and customer-owned self-service cogeneration.
Cols. (5) - (9) = Represent cumulative conservation and load control capabilities at peak. Col. (8) includes commercial load management and standby generation.
Col. (OTH) = Voltage reduction and customer-owned self-service cogeneration.
Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

DUKE ENERGY FLORIDA

SCHEDULE 3.3.3

HISTORY AND FORECAST OF ANNUAL NET ENERGY FOR LOAD (GWh)

LOW CASE FORECAST

(1) YEAR	(2) TOTAL	(3) RESIDENTIAL CONSERVATION	(4) COMM. / IND. CONSERVATION	(OTH) OTHER ENERGY REDUCTIONS	(5) RETAIL	(6) WHOLESALE	(7) UTILITY USE & LOSSES	(8) NET ENERGY FOR LOAD	(9) LOAD FACTOR (%) *	PEAK DEMAND (MW)
HISTORY:										
2012	43,396	733	669	780	36,381	1,768	3,065	41,214	52.1	9,026
2013	43,142	772	734	864	36,616	1,488	2,668	40,772	53.0	8,776
2014	43,443	812	791	864	37,240	1,333	2,402	40,975	50.7	9,218
2015	44,552	848	829	595	38,553	1,243	2,484	42,280	50.9	9,473
2016	45,200	892	857	596	38,774	1,803	2,277	42,854	50.6	9,646
2017	45,318	933	871	595	38,024	2,196	2,699	42,919	52.7	9,293
2018	46,729	977	933	595	39,145	2,304	2,775	44,224	48.9	10,320
2019	47,385	1,017	972	595	39,187	2,910	2,704	44,801	51.3	9,970
2020	47,476	1,050	1,016	596	39,230	2,887	2,697	44,814	52.9	6,132
2021	47,786	1,100	1,027	595	39,451	3,302	2,311	45,064	53.1	7,268
FORECAST:										
2022	42,676	1,149	1,037	595	36,424	1,428	2,043	39,894	58.2	7,829
2023	42,482	1,198	1,047	595	36,331	1,279	2,031	39,642	58.7	7,715
2024	42,720	1,247	1,056	596	36,449	1,277	2,094	39,821	58.7	7,727
2025	42,400	1,288	1,071	595	36,498	915	2,033	39,446	60.0	7,508
2026	42,627	1,331	1,081	595	36,657	915	2,049	39,621	60.1	7,521
2027	42,902	1,372	1,090	595	36,879	910	2,055	39,844	60.2	7,550
2028	43,303	1,412	1,100	596	37,167	900	2,129	40,195	61.4	7,458
2029	43,629	1,451	1,109	595	37,491	897	2,085	40,473	61.6	7,501
2030	43,944	1,488	1,119	595	37,747	897	2,098	40,742	61.7	7,541
2031	43,413	1,524	1,128	595	38,022	35	2,110	40,167	60.5	7,575

* Load Factors for historical years are calculated using the actual and projected annual peak.

DUKE ENERGY FLORIDA

SCHEDULE 4.1
PREVIOUS YEAR ACTUAL AND TWO-YEAR FORECAST OF PEAK DEMAND
AND NET ENERGY FOR LOAD BY MONTH
BASE CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	ACTUAL		FORECAST		FORECAST	
	2021		2022		2023	
MONTH	PEAK DEMAND MW	NEL GWh	PEAK DEMAND MW	NEL GWh	PEAK DEMAND MW	NEL GWh
JANUARY	**7,052**	3,268	**9,938**	3,224	**10,189**	3,263
FEBRUARY	8,308	2,857	8,946	2,880	9,196	2,877
MARCH	7,565	3,164	7,598	3,176	7,803	3,098
APRIL	7,871	3,245	7,581	3,282	7,314	3,182
MAY	8,735	4,034	8,900	3,802	8,662	3,852
JUNE	9,147	4,375	9,511	4,161	9,247	4,209
JULY	9,452	4,707	9,444	4,448	9,212	4,484
AUGUST	**9,681**	4,865	**9,650**	4,427	**9,417**	4,460
SEPTEMBER	8,770	4,309	9,235	4,140	8,989	4,164
OCTOBER	8,701	4,061	8,576	3,616	8,342	3,634
NOVEMBER	6,198	2,931	7,680	3,075	7,437	3,004
DECEMBER	6,210	3,250	8,440	3,210	8,662	3,206
TOTAL		45,064		43,440		43,432

NOTE: Recorded Net Peak demands and NEL include off-system wholesale contracts.

DUKE ENERGY FLORIDA

SCHEDULE 4.2
PREVIOUS YEAR ACTUAL AND TWO-YEAR FORECAST OF PEAK DEMAND
AND NET ENERGY FOR LOAD BY MONTH
HIGH CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	A C T U A L		F O R E C A S T		F O R E C A S T	
	2021		2022		2023	
MONTH	PEAK DEMAND MW	NEL GWh	PEAK DEMAND MW	NEL GWh	PEAK DEMAND MW	NEL GWh
JANUARY	**7,052**	3,268	**11,919**	3,531	**12,207**	3,583
FEBRUARY	8,308	2,857	10,328	3,166	10,604	3,173
MARCH	7,565	3,164	8,197	3,346	8,412	3,274
APRIL	7,871	3,245	7,811	3,463	7,563	3,367
MAY	8,735	4,034	9,093	3,966	8,858	4,019
JUNE	9,147	4,375	9,662	4,301	9,398	4,351
JULY	9,452	4,707	9,552	4,534	9,323	4,572
AUGUST	**9,681**	4,865	**9,742**	4,520	**9,534**	4,555
SEPTEMBER	8,770	4,309	9,394	4,242	9,150	4,267
OCTOBER	8,701	4,061	8,792	3,803	8,560	3,823
NOVEMBER	6,198	2,931	8,039	3,315	7,803	3,249
DECEMBER	6,210	3,250	9,420	3,633	9,658	3,636
TOTAL		45,064		45,820		45,869

NOTE: Recorded Net Peak demands and NEL include off-system wholesale contracts.

DUKE ENERGY FLORIDA

SCHEDULE 4.3
PREVIOUS YEAR ACTUAL AND TWO-YEAR FORECAST OF PEAK DEMAND
AND NET ENERGY FOR LOAD BY MONTH
LOW CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	ACTUAL		FORECAST		FORECAST	
	2021		2022		2023	
MONTH	PEAK DEMAND MW	NEL GWh	PEAK DEMAND MW	NEL GWh	PEAK DEMAND MW	NEL GWh
JANUARY	**7,052**	3,268	**8,759**	2,964	**8,910**	2,954
FEBRUARY	8,308	2,857	8,117	2,644	8,287	2,608
MARCH	7,565	3,164	7,116	2,885	7,274	2,779
APRIL	7,871	3,245	7,104	3,001	6,796	2,879
MAY	8,735	4,034	8,192	3,523	7,909	3,547
JUNE	9,147	4,375	8,642	3,849	8,328	3,872
JULY	9,452	4,707	8,518	4,157	8,259	4,172
AUGUST	**9,681**	4,865	**8,658**	4,122	**8,390**	4,138
SEPTEMBER	8,770	4,309	8,435	3,881	8,175	3,894
OCTOBER	8,701	4,061	7,935	3,283	7,661	3,295
NOVEMBER	6,198	2,931	7,284	2,757	6,990	2,683
DECEMBER	6,210	3,250	7,810	2,830	7,970	2,820
TOTAL		45,064		39,894		39,642

NOTE: Recorded Net Peak demands and NEL include off-system wholesale contracts.

DUKE ENERGY FLORIDA

SCHEDULE 5

FUEL REQUIREMENTS

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
				-ACTUAL-											
	FUEL REQUIREMENTS		UNITS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
(1)	NUCLEAR		TRILLION BTU	0	0	0	0	0	0	0	0	0	0	0	0
(2)	COAL		1,000 TON	1,562	2,390	2,294	1,358	1,107	880	820	721	923	754	860	766
(3)	RESIDUAL	TOTAL	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(4)		STEAM	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(5)		CC	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(6)		CT	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(7)		DIESEL	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(8)	DISTILLATE	TOTAL	1,000 BBL	118	191	21	7	12	12	12	16	15	18	20	19
(9)		STEAM	1,000 BBL	40	49	11	7	11	10	11	11	11	12	11	11
(10)		CC	1,000 BBL	3	0	0	0	0	0	0	0	0	0	0	0
(11)		CT	1,000 BBL	75	142	9	0	1	2	2	5	3	6	8	8
(12)		DIESEL	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(13)	NATURAL GAS	TOTAL	1,000 MCF	269,893	255,329	230,601	237,684	246,068	249,122	250,879	250,282	245,710	244,797	240,100	233,095
(14)		STEAM	1,000 MCF	25,624	23,250	14,695	13,970	20,750	18,990	20,497	16,863	17,786	16,175	16,430	15,458
(15)		CC	1,000 MCF	237,427	224,581	210,454	218,621	220,225	225,812	225,675	228,736	225,828	225,422	220,624	214,574
(16)		CT	1,000 MCF	6,841	7,498	5,452	5,092	5,093	4,320	4,707	4,683	2,096	3,201	3,047	3,064
	OTHER (SPECIFY)														
(17)	OTHER, DISTILLATE	ANNUAL FIRM INTERCHANGE	1,000 BBL	N/A	N/A	0	0	0	0	0	0	0	0	0	0
(18)	OTHER, NATURAL GAS	ANNUAL FIRM INTERCHANGE, CC	1,000 MCF	N/A	N/A	0	0	0	0	0	0	0	0	0	0
(18.1)	OTHER, NATURAL GAS	ANNUAL FIRM INTERCHANGE, CT	1,000 MCF	N/A	N/A	5,761	5,754	6,902	5,262	5,210	854	0	0	0	0
(19)	OTHER, COAL	ANNUAL FIRM INTERCHANGE, STEAM	1,000 TON	N/A	N/A	0	0	0	0	0	0	0	0	0	0

DUKE ENERGY FLORIDA

SCHEDULE 6.1
ENERGY SOURCES (GWh)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
				-ACTUAL-											
	ENERGY SOURCES		UNITS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
(1)	ANNUAL FIRM INTERCHANGE 1/		GWh	1,025	3,461	565	560	671	513	511	92	14	22	13	17
(2)	NUCLEAR		GWh	0	0	0	0	0	0	0	0	0	0	0	0
(3)	COAL		GWh	3,287	5,042	4,986	2,869	2,289	1,761	1,644	1,440	1,859	1,528	1,752	1,548
(4)	RESIDUAL	TOTAL	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(5)		STEAM	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(6)		CC	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(7)		CT	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(8)		DIESEL	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(9)	DISTILLATE	TOTAL	GWh	33	56	4	0	0	1	1	2	1	3	3	4
(10)		STEAM	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(11)		CC	GWh	2	0	0	0	0	0	0	0	0	0	0	0
(12)		CT	GWh	31	56	4	0	0	1	1	2	1	3	3	4
(13)		DIESEL	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(14)	NATURAL GAS	TOTAL	GWh	36,327	32,981	33,075	34,185	35,095	35,650	35,741	35,908	35,219	35,109	34,394	33,318
(15)		STEAM	GWh	2,244	570	1,316	1,236	1,903	1,729	1,856	1,505	1,589	1,441	1,450	1,354
(16)		CC	GWh	33,574	31,841	31,232	32,448	32,691	33,482	33,415	33,944	33,462	33,414	32,702	31,721
(17)		CT	GWh	510	570	527	501	501	438	470	460	167	254	242	243
(18)	OTHER 2/														
	QF PURCHASES		GWh	1,769	1,805	2,014	2,018	852	511	2	2	2	2	2	2
	RENEWABLES OTHER		GWh	0	0	0	0	0	0	0	0	0	0	0	0
	RENEWABLES MSW		GWh	654	609	883	918	970	605	605	605	608	605	605	605
	RENEWABLES BIOMASS		GWh	0	0	0	0	0	0	0	0	0	0	0	0
	RENEWABLES SOLAR		GWh	706	942	1,913	2,882	3,872	4,453	5,274	6,070	6,899	7,697	8,558	9,378
	IMPORT FROM OUT OF STATE		GWh	1,013	169	0	0	0	0	0	0	0	0	0	0
	EXPORT TO OUT OF STATE		GWh	0	0	0	0	0	0	0	0	0	0	0	0
(19)	NET ENERGY FOR LOAD		GWh	44,814	45,064	43,440	43,432	43,750	43,495	43,776	44,120	44,602	44,966	45,328	44,872

1/ NET ENERGY PURCHASED (+) OR SOLD (-) WITHIN THE FRCC REGION.
2/ NET ENERGY PURCHASED (+) OR SOLD (-).

DUKE ENERGY FLORIDA

SCHEDULE 6.2
ENERGY SOURCES (PERCENT)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
				-ACTUAL-											
	ENERGY SOURCES		UNITS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
(1)	ANNUAL FIRM INTERCHANGE 1/		%	2.3%	7.7%	1.3%	1.3%	1.5%	1.2%	1.2%	0.2%	0.0%	0.0%	0.0%	0.0%
(2)	NUCLEAR		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(3)	COAL		%	7.3%	11.2%	11.5%	6.6%	5.2%	4.0%	3.8%	3.3%	4.2%	3.4%	3.9%	3.5%
(4)	RESIDUAL	TOTAL	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(5)		STEAM	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(6)		CC	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(7)		CT	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(8)		DIESEL	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(9)	DISTILLATE	TOTAL	%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(10)		STEAM	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(11)		CC	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(12)		CT	%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(13)		DIESEL	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(14)	NATURAL GAS	TOTAL	%	81.1%	73.2%	76.1%	78.7%	80.2%	82.0%	81.6%	81.4%	79.0%	78.1%	75.9%	74.3%
(15)		STEAM	%	5.0%	1.3%	3.0%	2.8%	4.4%	4.0%	4.2%	3.4%	3.6%	3.2%	3.2%	3.0%
(16)		CC	%	74.9%	70.7%	71.9%	74.7%	74.7%	77.0%	76.3%	76.9%	75.0%	74.3%	72.1%	70.7%
(17)		CT	%	1.1%	1.3%	1.2%	1.2%	1.1%	1.0%	1.1%	1.0%	0.4%	0.6%	0.5%	0.5%
(18)	OTHER 2/														
	QF PURCHASES		%	3.9%	4.0%	4.6%	4.6%	1.9%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	RENEWABLES OTHER		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	RENEWABLES MSW		%	1.5%	1.4%	2.0%	2.1%	2.2%	1.4%	1.4%	1.4%	1.4%	1.3%	1.3%	1.3%
	RENEWABLES BIOMASS		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	RENEWABLES SOLAR		%	1.6%	2.1%	4.4%	6.6%	8.9%	10.2%	12.0%	13.8%	15.5%	17.1%	18.9%	20.9%
	IMPORT FROM OUT OF STATE		%	2.3%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	EXPORT TO OUT OF STATE		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(19)	NET ENERGY FOR LOAD		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

1/ NET ENERGY PURCHASED (+) OR SOLD (-) WITHIN THE FRCC REGION.
2/ NET ENERGY PURCHASED (+) OR SOLD (-).

DUKE ENERGY FLORIDA

SCHEDULE 7.1
FORECAST OF CAPACITY, DEMAND AND SCHEDULED MAINTENANCE
AT TIME OF SUMMER PEAK

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	TOTAL INSTALLED CAPACITY	FIRM[a] CAPACITY IMPORT	FIRM CAPACITY EXPORT	QF[b]	TOTAL CAPACITY AVAILABLE	SYSTEM FIRM SUMMER PEAK DEMAND	RESERVE MARGIN BEFORE MAINTENANCE		SCHEDULED MAINTENANCE	RESERVE MARGIN AFTER MAINTENANCE	
YEAR	MW	MW	MW	MW	MW	MW	MW	% OF PEAK	MW	MW	% OF PEAK
2022	10,118	1,469	0	78	11,665	8,821	2,844	32%	0	2,844	32%
2023	10,287	1,469	0	78	11,833	8,583	3,250	38%	0	3,250	38%
2024	10,492	873	0	78	11,442	8,648	2,794	32%	0	2,794	32%
2025	10,900	758	0	0	11,658	8,475	3,183	38%	0	3,183	38%
2026	10,799	654	0	0	11,453	8,523	2,930	34%	0	2,930	34%
2027	10,560	0	0	0	10,560	8,582	1,978	23%	0	1,978	23%
2028	10,586	0	0	0	10,586	8,667	1,919	22%	0	1,919	22%
2029	10,831	0	0	0	10,831	8,733	2,098	24%	0	2,098	24%
2030	10,863	0	0	0	10,863	8,798	2,065	23%	0	2,065	23%
2031	10,894	0	0	0	10,894	8,861	2,033	23%	0	2,033	23%

Notes:

a. FIRM Capacity Import includes Cogeneration, Utility and Independent Power Producers, and Short Term Purchase Contracts.

b. QF includes Firm Renewables

DUKE ENERGY FLORIDA

SCHEDULE 7.2
FORECAST OF CAPACITY, DEMAND AND SCHEDULED MAINTENANCE
AT TIME OF WINTER PEAK

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	TOTAL INSTALLED CAPACITY	FIRM[a] CAPACITY IMPORT	FIRM CAPACITY EXPORT	QF[b]	TOTAL CAPACITY AVAILABLE	SYSTEM FIRM WINTER PEAK DEMAND	RESERVE MARGIN BEFORE MAINTENANCE		SCHEDULED MAINTENANCE	RESERVE MARGIN AFTER MAINTENANCE	
YEAR	MW	MW	MW	MW	MW	MW	MW	% OF PEAK	MW	MW	% OF PEAK
2021/22	10,759	1,555	0	78	12,392	8,747	3,644	42%	0	3,644	42%
2022/23	10,759	1,555	0	78	12,392	8,993	3,399	38%	0	3,399	38%
2023/24	10,759	1,440	0	78	12,277	9,061	3,216	35%	0	3,216	35%
2024/25	11,114	802	0	0	11,916	8,882	3,034	34%	0	3,034	34%
2025/26	10,888	698	0	0	11,586	8,929	2,657	30%	0	2,657	30%
2026/27	10,888	698	0	0	11,586	8,988	2,598	29%	0	2,598	29%
2027/28	10,445	0	0	0	10,445	8,472	1,973	23%	0	1,973	23%
2028/29	10,445	0	0	0	10,445	8,529	1,916	22%	0	1,916	22%
2029/30	10,697	0	0	0	10,697	8,582	2,115	25%	0	2,115	25%
2030/31	10,716	0	0	0	10,716	8,628	2,088	24%	0	2,088	24%

Notes:

a. FIRM Capacity Import includes Cogeneration, Utility and Independent Power Producers, and Short Term Purchase Contracts.

b. QF includes Firm Renewables

DUKE ENERGY FLORIDA

SCHEDULE 8
PLANNED AND PROSPECTIVE GENERATING FACILITY ADDITIONS AND CHANGES

AS OF JANUARY 1, 2022 THROUGH DECEMBER 31, 2031

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
												FIRM			
								CONST.	COM'L IN-	EXPECTED	GEN. MAX.	NET CAPABILITY			
	UNIT	LOCATION	UNIT	FUEL		FUEL TRANSPORT		START	SERVICE	RETIREMENT	NAMEPLATE	SUMMER	WINTER		
PLANT NAME	NO.	(COUNTY)	TYPE	PRI.	ALT.	PRI.	ALT.	MO. / YR	MO. / YR	MO. / YR	KW	MW	MW	STATUS[a]	NOTES[b]
BAY TRAIL	1	CITRUS	PV	SO				03/2021	04/2022		74,900	43	0	P	(1)
SANDY CREEK	1	BAY	PV	SO				06/2021	04/2022		74,900	43	0	P	(1)
FORT GREEN	1	HARDEE	PV	SO				07/2021	05/2022		74,900	43	0	P	(1)
CHARLIE CREEK	1	HARDEE	PV	SO				05/2021	08/2022		74,900	43	0	P	(1)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(1)			(2)
BAY RANCH	1	BAY	PV	SO				05/2022	01/2023		74,900	43	0	P	(1)
HILDRETH	1	SUWANNEE	PV	SO				05/2022	01/2023		74,900	43	0	P	(1)
HARDEETOWN	1	LEVY	PV	SO				05/2022	01/2023		74,900	43	0	P	(1)
HIGH SPRINGS	1	ALACHUA	PV	SO				06/2022	02/2023		74,900	43	0	P	(1)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(2)			(2)
CLEAN ENERGY CONNECTION		UNKNOWN	PV	SO				05/2023	01/2024		299,600	171	0	P	(1) and (4)
OSPREY CC	1	POLK	CC	NG	DFO	PL	TK		11/2024			337	355	P	(3)
UNKNOWN		UNKNOWN	PV	SO				11/2023	07/2024		149,800	37	0	P	(1) and (4)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(3)			(2)
UNKNOWN		UNKNOWN	PV	SO				11/2024	07/2025		299,600	75	0	P	(1) and (4)
BAYBORO	P1 - P4	PINELLAS	CT	DFO		WA				12/2025		(171)	(238)		
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(4)			(2)
UNKNOWN		UNKNOWN	PV	SO				11/2025	07/2026		299,600	75	0	P	(1) and (4)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(5)			(2)
DEBARY	P2 - P6	VOLUSIA	CT	DFO		TK				06/2027		(247)	(324)		
BARTOW	P1, P3	PINELLAS	CT	DFO		WA				06/2027		(82)	(105)		
UNKNOWN		UNKNOWN	PV	SO				11/2026	07/2027		299,600	75	0	P	(1) and (4)
UNIVERSITY OF FLORIDA	P1	ALACHUA	GT	NG		PL				11/2027		(43)	(50)		
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(5)			(2)
UNKNOWN		UNKNOWN	PV	SO				11/2027	07/2028		299,600	75	0	P	(1) and (4)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(5)			(2)
UNKNOWN	P1	UNKNOWN	CT	NG	DFO	PL	TK	07/2026	06/2029		227,500	214	233	P	(1)
UNKNOWN		UNKNOWN	PV	SO				11/2028	07/2029		149,800	19	0	P	(1) and (4)
UNKNOWN		UNKNOWN	SPS	SO				11/2028	07/2029		149,800	19	19	P	(1) and (4)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(6)			(2)
UNKNOWN		UNKNOWN	PV	SO				11/2029	07/2030		149,800	19	0	P	(1) and (4)
UNKNOWN		UNKNOWN	SPS	SO				11/2029	07/2030		149,800	19	19	P	(1) and (4)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(6)			(2)
UNKNOWN		UNKNOWN	PV	SO				11/2030	07/2031		149,800	19	0	P	(1) and (4)
UNKNOWN		UNKNOWN	SPS	SO				11/2030	07/2031		149,800	19	19	P	(1) and (4)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(6)			(2)

a. See page v. for Code Identification of Future Generating Unit Status.

b. NOTES

(1) Planned, Prospective, or Committed project.

(2) Solar capacity degrades by 0.5% every year

(3) Osprey CC Acquisition total capacity is available once Transmission Upgrades are in service, total Summer capacity goes up to 583MW and total Winter capacity goes up to 600MW

DUKE ENERGY FLORIDA

SCHEDULE 9
STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2022

(1)	Plant Name and Unit Number:		**Bay Trail**	
(2)	Capacity			
	a. Nameplate (MWac):		74.9	
	b. Summer Firm (MWac):		42.7	
	c. Winter Firm (MWac):		-	
(3)	Technology Type:		PHOTOVOLTAIC	
(4)	Anticipated Construction Timing			
	a. Field construction start date:		3/2021	
	b. Commercial in-service date:		4/2022	(EXPECTED)
(5)	Fuel			
	a. Primary fuel:		SOLAR	
	b. Alternate fuel:		N/A	
(6)	Air Pollution Control Strategy:		N/A	
(7)	Cooling Method:		N/A	
(8)	Total Site Area:		~500-600 ACRES	
(9)	Construction Status:		PLANNED	
(10)	Certification Status:			
(11)	Status with Federal Agencies:			
(12)	Projected Unit Performance Data			
	a. Planned Outage Factor (POF):		N/A	%
	b. Forced Outage Factor (FOF):		N/A	%
	c. Equivalent Availability Factor (EAF):		N/A	%
	d. Resulting Capacity Factor (%):		~28	%
	e. Average Net Operating Heat Rate (ANOHR):		N/A	BTU/Kwh
(13)	Projected Unit Financial Data			
	a. Book Life (Years):		30	
	b. Total Installed Cost (In-service year $/Kw):		1,371.67	
	c. Direct Construction Cost ($/Kw ac):	($2022)		
	d. AFUDC Amount ($/Kw):			
	e. Escalation ($/Kw):			
	f. Fixed O&M ($/Kw dc-yr):	($2022)	9.39	
	g. Variable O&M ($/MWh):	($2022)	0.00	
	h. K Factor:		NO CALCULATION	

DUKE ENERGY FLORIDA

SCHEDULE 10
STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

OSPREY

POINT OF ORIGIN AND TERMINATION:	Kathleen - Osprey
NUMBER OF LINES:	1
RIGHT-OF-WAY:	New transmission line right-of-way
LINE LENGTH:	26.5 miles
VOLTAGE:	230 kV
ANTICIPATED CONSTRUCTION TIMING:	11/1/2024
ANTICIPATED CAPITAL INVESTMENT:	$150,000,000
SUBSTATIONS:	Kathleen, Osprey
PARTICIPATION WITH OTHER UTILITIES:	N/A

DUKE ENERGY FLORIDA

SCHEDULE 10

STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

BAY TRAIL SOLAR

POINT OF ORIGIN AND TERMINATION:	Citrus Combined Cycle
NUMBER OF LINES:	1
RIGHT-OF-WAY:	New and existing transmission line right-of-way
LINE LENGTH:	1.1 miles
VOLTAGE:	230 kV
ANTICIPATED CONSTRUCTION TIMING:	4/1/2022
ANTICIPATED CAPITAL INVESTMENT:	$1,500,000
SUBSTATIONS:	Citrus Combined Cycle
PARTICIPATION WITH OTHER UTILITIES:	N/A

DUKE ENERGY FLORIDA

SCHEDULE 10

STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

SANDY CREEK SOLAR

POINT OF ORIGIN AND TERMINATION:	Ladybug Substation
NUMBER OF LINES:	1
RIGHT-OF-WAY:	New and existing transmission line right-of-way
LINE LENGTH:	0.03 miles
VOLTAGE:	230 kV
ANTICIPATED CONSTRUCTION TIMING:	4/1/2022
ANTICIPATED CAPITAL INVESTMENT:	$2,800,000
SUBSTATIONS:	Ladybug Substation
PARTICIPATION WITH OTHER UTILITIES:	N/A

DUKE ENERGY FLORIDA

SCHEDULE 10

STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

FORT GREEN SOLAR

POINT OF ORIGIN AND TERMINATION:	Fort Green Springs Substation
NUMBER OF LINES:	1
RIGHT-OF-WAY:	Existing transmission line right-of-way
LINE LENGTH:	0.03 miles
VOLTAGE:	69 kV
ANTICIPATED CONSTRUCTION TIMING:	5/1/2022
ANTICIPATED CAPITAL INVESTMENT:	$2,370,000
SUBSTATIONS:	Fort Green Springs Substation
PARTICIPATION WITH OTHER UTILITIES:	N/A

DUKE ENERGY FLORIDA

SCHEDULE 10
STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

CHARLIE CREEK SOLAR

POINT OF ORIGIN AND TERMINATION:	Singletary Substation
NUMBER OF LINES:	1
RIGHT-OF-WAY:	Existing transmission line right-of-way
LINE LENGTH:	0.04 miles
VOLTAGE:	230 kV
ANTICIPATED CONSTRUCTION TIMING:	8/1/2022
ANTICIPATED CAPITAL INVESTMENT:	$1,771,000
SUBSTATIONS:	Singletary Substation
PARTICIPATION WITH OTHER UTILITIES:	N/A

DUKE ENERGY FLORIDA

SCHEDULE 10

STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

BAY RANCH SOLAR

POINT OF ORIGIN AND TERMINATION:	Honeybee Switching Station
NUMBER OF LINES:	1
RIGHT-OF-WAY:	Existing transmission line right-of-way
LINE LENGTH:	0.03 miles
VOLTAGE:	230 kV
ANTICIPATED CONSTRUCTION TIMING:	1/1/2023
ANTICIPATED CAPITAL INVESTMENT:	$2,834,000
SUBSTATIONS:	Honeybee Switching Station
PARTICIPATION WITH OTHER UTILITIES:	N/A

DUKE ENERGY FLORIDA

SCHEDULE 10

STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

HILDRETH SOLAR

POINT OF ORIGIN AND TERMINATION:	Hickory Switching Station
NUMBER OF LINES:	1
RIGHT-OF-WAY:	Existing transmission line right-of-way
LINE LENGTH:	0.03 miles
VOLTAGE:	69 kV
ANTICIPATED CONSTRUCTION TIMING:	1/1/2023
ANTICIPATED CAPITAL INVESTMENT:	$2,452,000
SUBSTATIONS:	Hickory Switching Station
PARTICIPATION WITH OTHER UTILITIES:	N/A

DUKE ENERGY FLORIDA

SCHEDULE 10

STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

HARDEETOWN SOLAR

POINT OF ORIGIN AND TERMINATION:	Chiefland Substation
NUMBER OF LINES:	1
RIGHT-OF-WAY:	Existing transmission line right-of-way
LINE LENGTH:	0.07 miles
VOLTAGE:	69 kV
ANTICIPATED CONSTRUCTION TIMING:	1/1/2023
ANTICIPATED CAPITAL INVESTMENT:	$2,245,000
SUBSTATIONS:	Chiefland Substation
PARTICIPATION WITH OTHER UTILITIES:	N/A

DUKE ENERGY FLORIDA

SCHEDULE 10

STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

HIGH SPRINGS SOLAR

POINT OF ORIGIN AND TERMINATION:	Ginnie Substation
NUMBER OF LINES:	1
RIGHT-OF-WAY:	Existing transmission line right-of-way
LINE LENGTH:	0.06 miles
VOLTAGE:	69 kV
ANTICIPATED CONSTRUCTION TIMING:	2/1/2023
ANTICIPATED CAPITAL INVESTMENT:	$1,497,000
SUBSTATIONS:	Ginnie Substation
PARTICIPATION WITH OTHER UTILITIES:	N/A